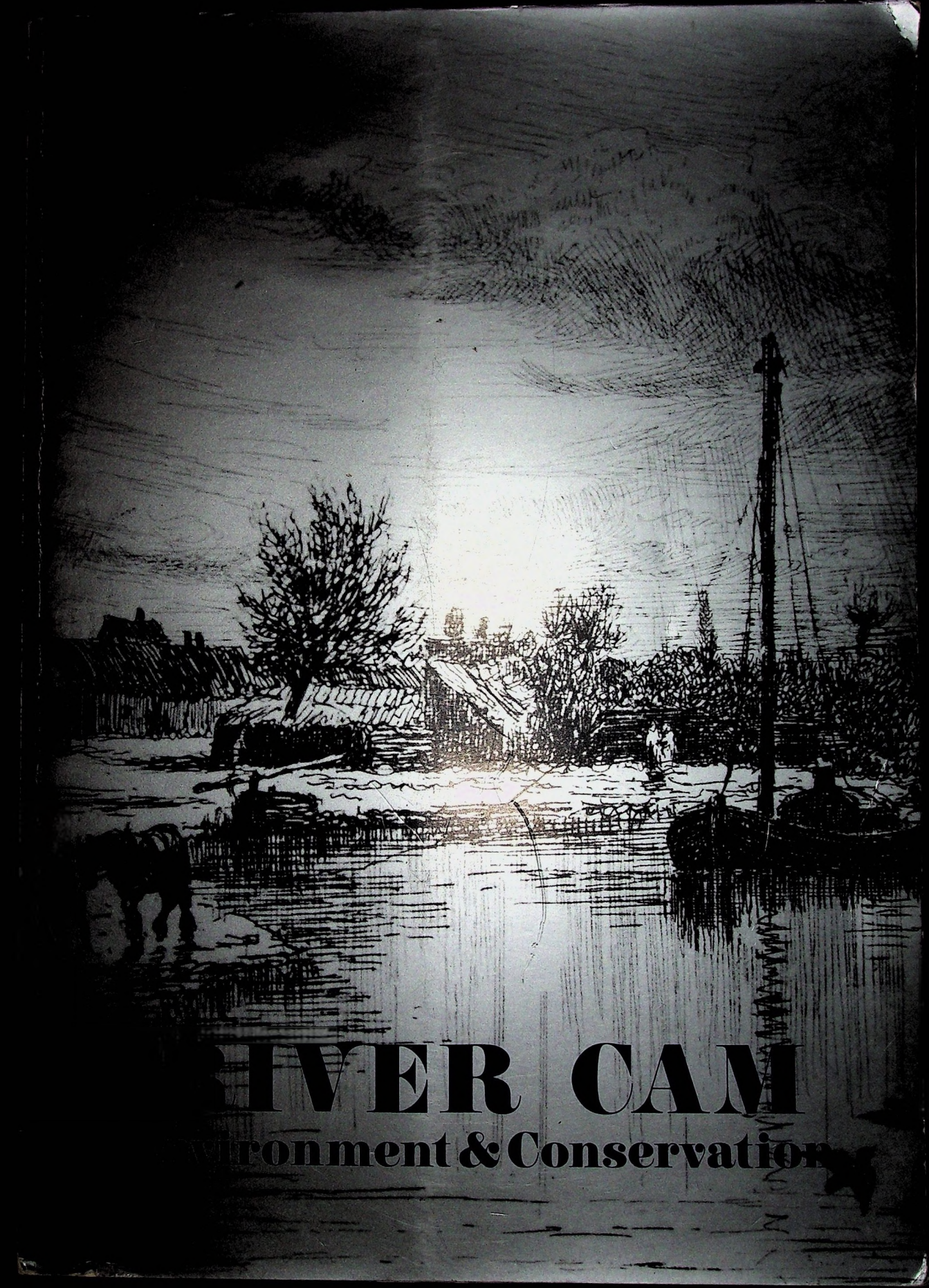
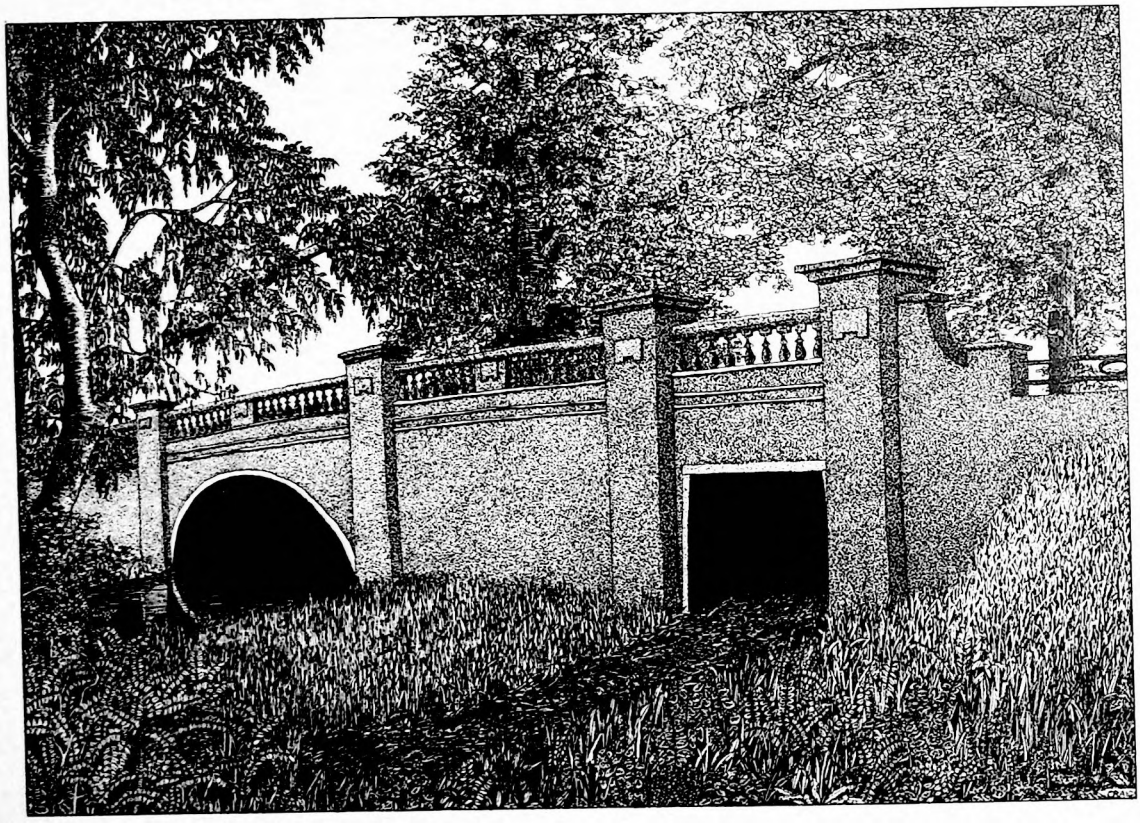

IVER CAM
ronment & Conservation

RIVER CAM

Environment & Conservation

Department of Architecture and Planning
The Guildhall, Cambridge



Fen Causeway Bridge

Contents

Introduction. 1

Survey and Analysis. 5
- Byron's Pool. 7
- Grantchester Meadows. 13
- Sheep's Green and Coe Fen. 19
- The Backs. 31
- Quayside. 41
- Jesus Green and Midsummer Common. 47
- Riverside. 57
- Stourbridge Common and Ditton Meadows. 63

Bridges. 69

Recreational Facilities. 79
- Boating. 81
- Walking. 84
- Swimming. 85
- Fishing. 85

Natural History. 89

Environmental Details. 101
- Water's Edge. 105
- Railings and Fences. 111
- Paths. 119
- Furniture. 127
- Bridges. 135

Area Improvements. 139
- Byron's Pool. 143
- Sheep's Green and Coe Fen. 147

Possible Future Schemes. 157
- Quayside. 161
- Cheddar's Lane. 163

Acknowledgements. 165

Introduction

The River Cam with its immediate surroundings is sometimes beautiful, sometimes of almost international significance and occasionally dull.

It has its origin in the meeting of two streams which rise near Newport in Essex and Ashwell in Hertfordshire. From this point some three miles south of Cambridge it flows northwards for sixteen miles to join the Great Ouse at Upware. This report is concerned with six of those miles from Byron's Pool, Grantchester, to Fen Ditton.

The river flows through watermeadows, commons and gardens which together form a linked series of open spaces penetrating the heart of the City. This is an asset which few other towns possess. Furthermore, when the back-cloth to the open spaces is so often formed by University and City buildings of great architectural quality, a unique atmosphere is created which is of special significance for the City, its inhabitants and its many visitors.

The first part of the report contains survey and analysis information. Each area of the river is described and its salient features, both good and bad, are pointed out. Plans illustrate the sections of the text and show the location of the river in relation to the surrounding buildings and open spaces, together with a simple analysis of the basic landscape characteristics. Suggestions are put forward indicating those areas which should remain basically as they are, and those where there is either the need or the potential for change. Further sections describe in detail the most important bridges spanning the river, the use of the river for recreation and a brief description of its natural history.

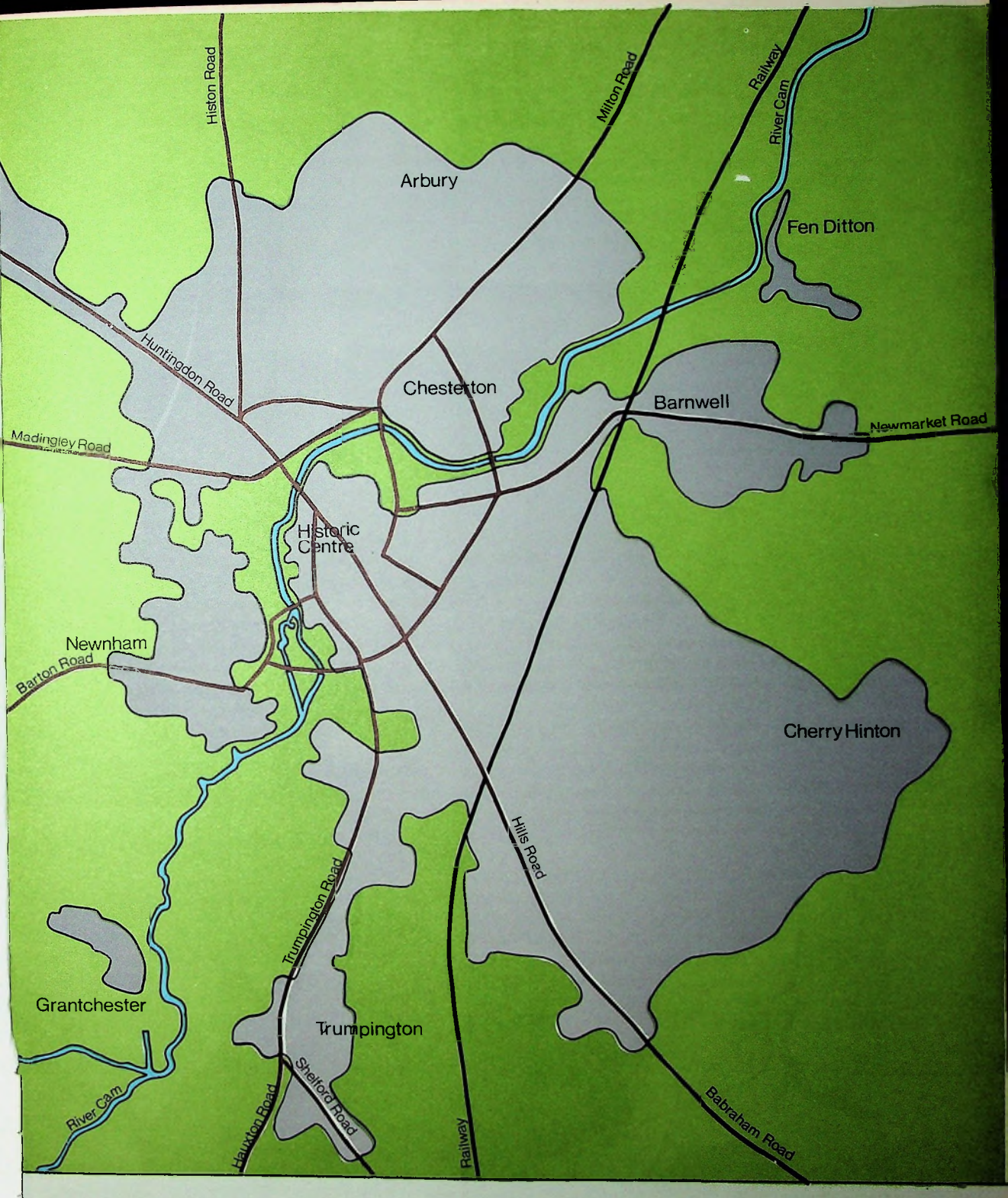
The second part of the report deals with the detailed treatment of such things as fences, railings, paths and banks which have a considerable influence on the quality of the river scene. Good existing examples of appropriate types of treatment are shown by drawings and photographs, together with some new details to solve particular problems.

The final part of the report puts forward ideas for the redevelopment of Quayside and for a museum of industrial archaeology at Cheddar's Lane. The ideas show only one possible way of improving these areas, and it is hoped that active discussion of further possibilities will be generated.

Whilst the opinions in the report are those of the Department of Architecture and Planning, and no attempt has been made to cost the suggestions put forward, it is hoped that it may help the owners of river-side lands, the authorities and organisations concerned and the public to recognise the river's immense value to the City and to generate discussion which may lead to a further realisation of its full potential.

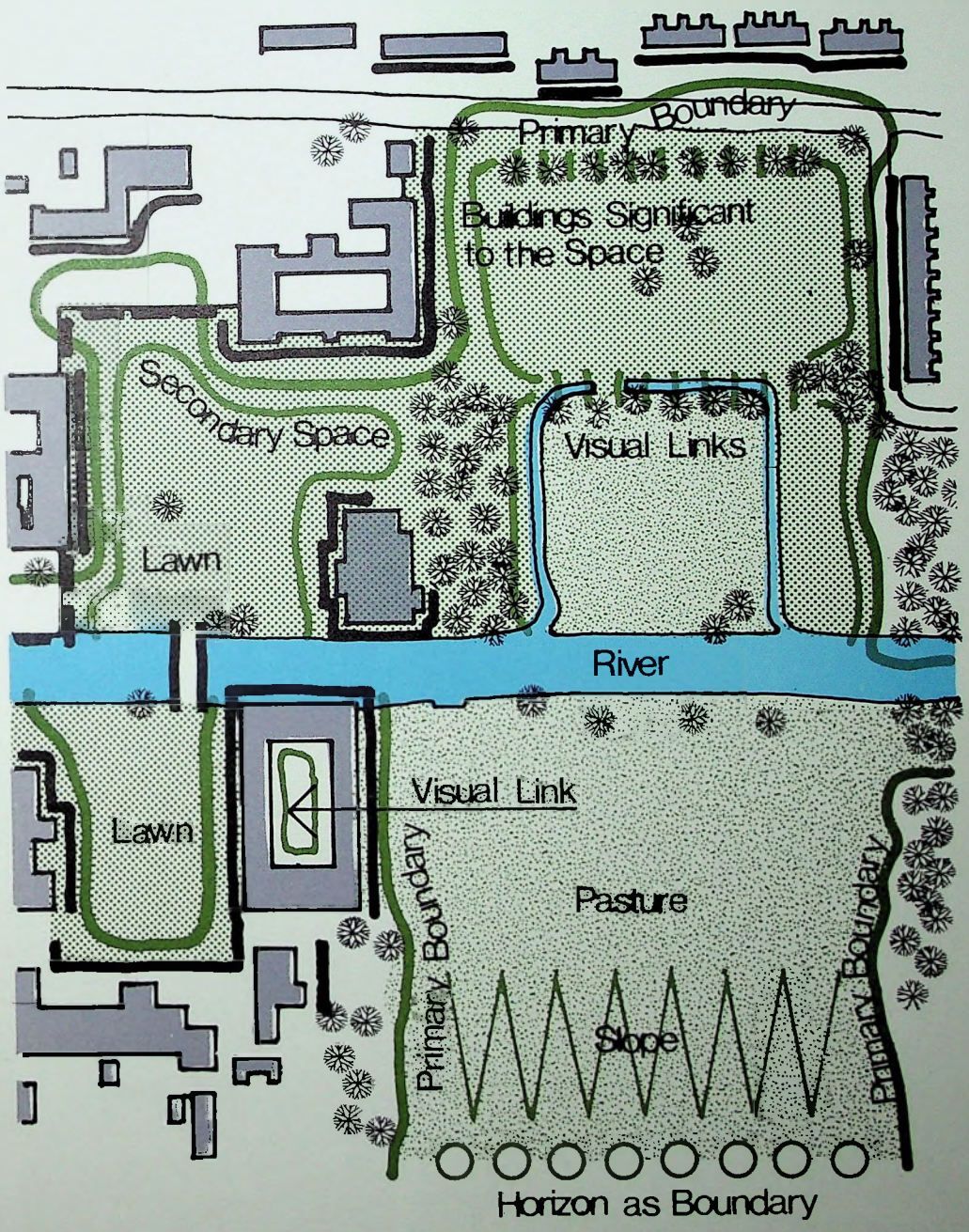
I. M. PURDY.
City Architect and Planning Officer.

Survey and Analysis



The River in Relation to the City

Notation for Analysis Plans



Byron's Pool

N

Bourn Brook

River Cam

Weir

Byron's Pool

Mill Race

The Mill

Mill Stream

Gardens

Grantchester

Manor Farm

Church

Mill Way

High Street

Burnt Close

Coton Road

Broadway

Grantchester Road

Grantchester Meadows

River Cam

Old Mill Plantation

Car Park

Woodend

Brasley Bridge

Grantchester Road Plantation

Trumpington Hall

Eight Acre Wood

Seven Acre Wood

Grantchester Road

Byron's Pool to Grantchester Location Plan

0 100 200

0 200 400 600

N

long views to
Trumpington Road

Byron's Pool to
Grantchester
Analysis Plan

0 100 200 metres

0 200 400 600 feet

Byron's Pool, just south of Grantchester, is a pleasant wooded area which is open to the public. The contrast between the woodland atmosphere on the east bank and the open, uninterrupted farmland over the river adds to its quality and to the contrasts of light and shade which make it attractive throughout the year. The weir and pool itself, from which the area gets its name, is the focal point to which most visitors are attracted. Here, the relatively rural isolation combined with the magnetism that the sound of falling water always seems to create, make it one of the most popular places on the river.

Just because of this, however, the area is under very heavy pressure from the increasing number of people who visit it. One particular aspect which causes severe problems is that many people arrive by car, drive down a narrow path beside the cottages on Grantchester Road, and park indiscriminately on the open area along the river bank. There is an obvious necessity here to impose a modicum of organisation and to separate off an area for car parking, suitably screened, so that the rest of the space may be enjoyed to the full.

The intensive use is also having a serious effect on the woodland area itself. Paths have been beaten through the undergrowth and the river bank has been eroded. The more paths which are allowed to remain, the less the woodland atmosphere is maintained. A definite network of paths should be established and the remainder returned to natural flora in such a way as to discourage further path beating.

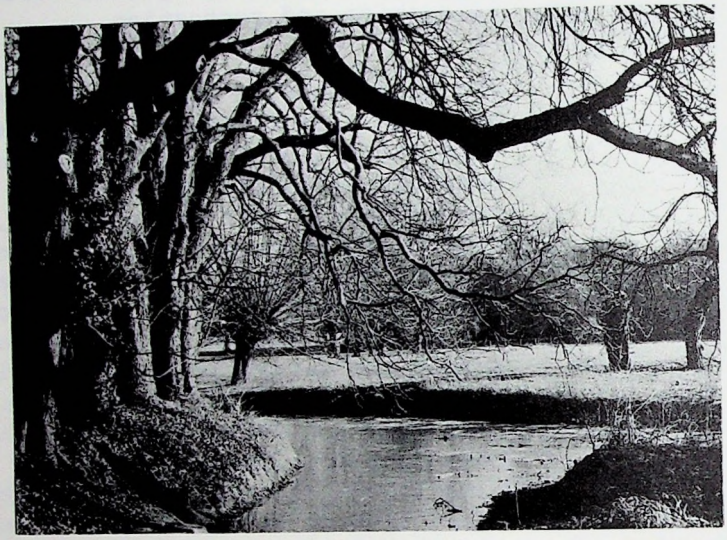
The space around the pool and weir is also under heavy stress, so much so that it does not recover from over use in the summer and therefore needs treatment.

The weir and pool

Later in the report these problems are reiterated because it seems that only by positive action will the area's survival and continuing contribution to the local environment be ensured.

One possible further answer would be to enhance other areas of the river which could serve a similar function, and thus relieve some of the pressure which causes the problems of over use.

The meadows are a favourite picnicking place, especially for those who have punted south from the City, and the total atmosphere epitomises a lazy summer day's outing.

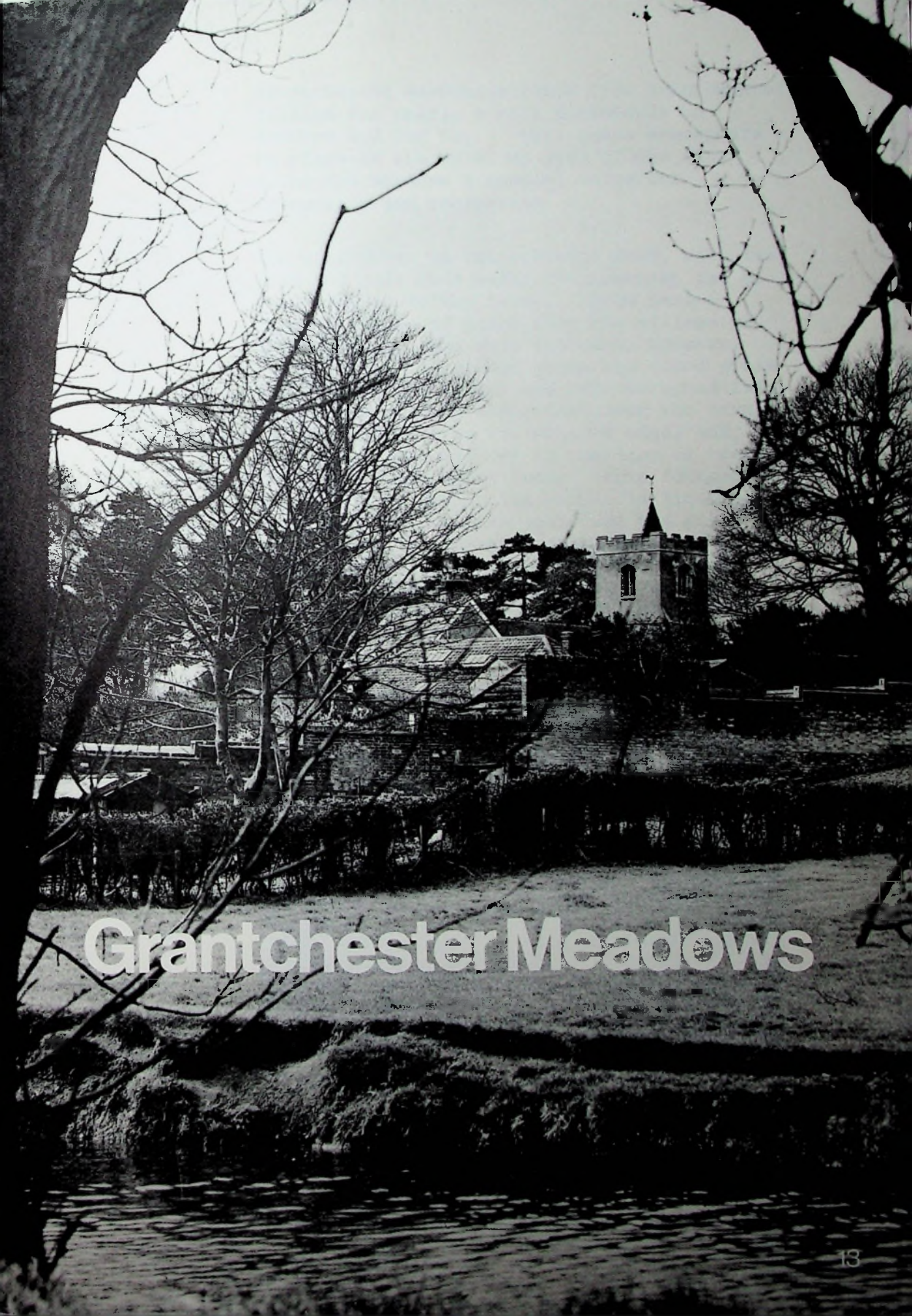


Grantchester Meadows

Existing planning policies designate the area as Green Belt and as an area of great landscape value. This has served to keep development from impinging on the environment and so preserves its rural qualities. Great care needs to be taken to maintain this status quo, and especially to maintain an uninterrupted skyline. The impact of any future development at Trumpington or Grantchester should, therefore, be very carefully considered.

Furthermore, discouragement of the use of power boats above Jesus lock should be continued so as to preserve the still atmosphere, and reduce damage to the river's natural banks.

Some small scale improvements could be made in the area. The main footpath has a series of gates which are difficult to negotiate with prams and pushchairs, and the areas around the gates suffer from heavy wear and could be better detailed.


Grantchester Meadows

Grantchester Meadows stretch from Grantchester Village for nearly a mile northwards to Newnham and Coe Fen. This rural atmosphere so close to the built-up area of the City gives the meadows a special value for relaxation and recreation.

The Mill House on Grantchester Road, with its pond and mill race marks the southern end of this section of the river. From here a complex series of paths link the village to the meadows. The main footpath, however, follows the high ground above the flood plain and affords delightful and uninterrupted landscape views to the east, down over the river and willow trees on the water's edge, and across the watermeadows to the line of trees along the Trumpington Road. This footpath is well used and during the summer is often quite busy, but its location away from the river bank leaves an undisturbed atmosphere for those sitting at the water's edge. This sense of seclusion is enhanced by the way in which the meadows are cut into individual pockets by transverse hedges and drains.

The Watermeadows across to Trumpington Road

Byron's Pool

Sheep's Green and Coe Fen

Grantchester Road
Grantchester Meadows
Allotments
University Bathing Places
Paradise Island
Millington Road
South Green Road
Marlowe Road
Tennyson Road
Tisley Avenue
Coleridge Road
Milton Road
Barton Road
Nurses Home
Playing Fields
Nature Reserve
Car Park
Woman's Bathing Place
Men's Bathing Place
Pool
Summerfield
Newnham Road
Newnham
Lammas Land
Tennis
Bowling
Sheep's Green
Newnham Walk
Sidgwick Avenue
West Road
Queens' College
Queens Road
Queens Green
Darwin College
Silver Street
Mill Pool
Mill Pb
Laundress Green
Mill Pool Boat Hire
Boat Hire
Hotel
Peterhouse
Grove
Coe Fen
Cutsoe Bridge
Fitzwilliam Museum
Engineering Laboratories
Trumpington Street
Trumpington Road
Leys School
Playing Fields
New Bit
Vicar's Brook
Latham Road
Chaucer Road
The Fen Causeway
N

Grantchester Meadows to Laundress Green Location Plan

0 100 200 metres
0 200 400 600 800 feet

long views to
Trumpington Road

Grantchester Meadows to
Laundress Green
Analysis Plan

0 100 200 metres
0 200 400 600 800 feet

Between the University Bathing Places at the Northern end of Grantchester Meadows and the Southern end of Sheep's Green and Coe Fen, the river is not readily accessible to the public.

The east bank is private watermeadow land. There are two interesting features on the west bank, which is in part privately owned. Paradise Island, lying behind the houses in Grantchester Meadows road, is a well wooded area which forms a natural visual break in the river environment. The area immediately to the north exhibits a natural regeneration of riverside flora and is consequently of great interest to naturalists. It should be protected from any possibility of change.

Paradise Woods

North of this point the Mill Stream, which feeds Newnham Mill, branches off to the west, and the river area is divided into three main parts, Lammas Land to the west, Sheep's Green between the two watercourses, and Coe Fen to the east. Each of these three areas has its own particular character and the total landscape is thus complex.

Lammas Land is, in reality, a park for the City. It contrasts strongly with the rural atmosphere of the rest of the area in that it is an organised and maintained space. The whole area along the Mill Stream is devoted to children's play and has a formal paddling pool which is extremely popular, and a variety of play equipment whose bright colour adds gaiety to the scene. The bowling green and tennis courts are also a valuable recreational asset to the locality.

Just to the south of the children's play area are a collection of timber storage buildings whose appearance could be improved. The car parking area immediately to the south, however, is visually most unsatisfactory. Although it is partly screened by planting, considerably more needs to be done to reduce its visual intrusion.

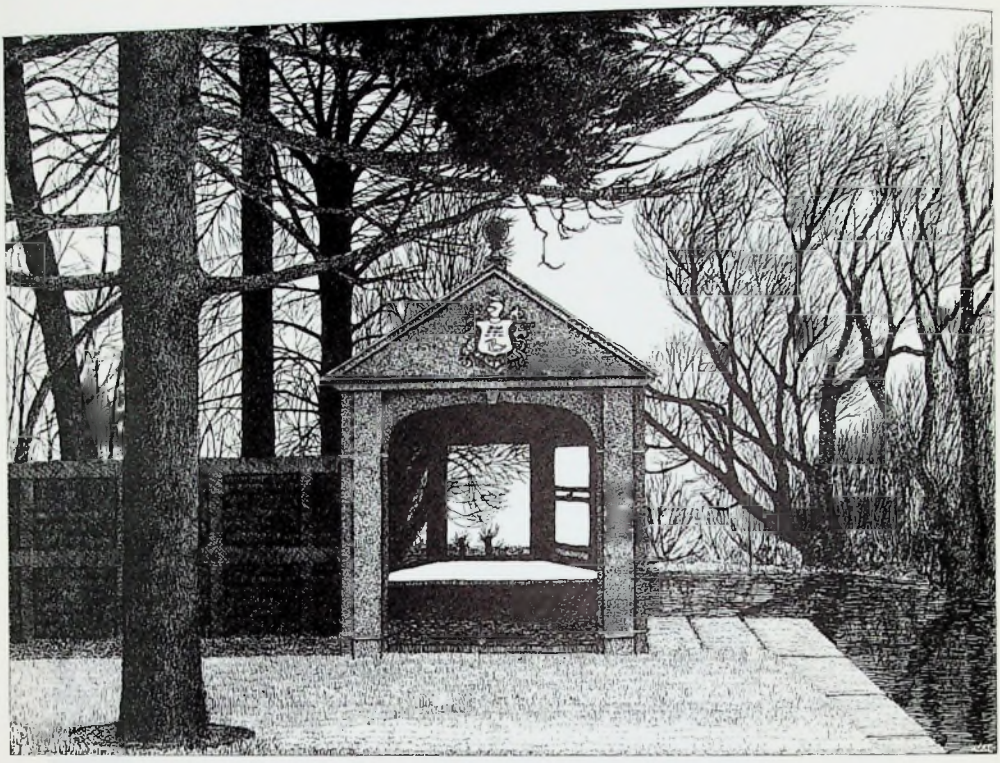
The southern part of Sheep's Green retains its rural atmosphere. The rough meadowland surface is broken by drains which indicate the lines of older watercourses, and has good trees. The tall, narrow poplars in particular add an important element to the landscape. The embankment to the Mill Stream on the west side forms a positive edge to the area.

Sheep's Green

The most dominant elements, however, are the collection of buildings which make up the Bathing Places. The Women's Bathing Place is situated on the triangle of land between the Cam and Newnham Mill Stream. The changing accommodation, which cuts off a neck of land, should be painted in a more subdued colour. The Men's Bathing Place is more natural in treatment except for the bright red tiled roof of the central section, but its long horizontal mass should be broken by selective planting.

Sheep's Green bathing place

On the eastern side of the main river a narrow open space, known as New Bit, leads down to Trumpington Road. More could be made of this area with further planting along the boundary to the Leys School, and the provision of more appropriate and better located seats.



Opposite Newnham swimming pool

The southern part of Coe Fen contrasts with Sheep's Green and New Bit. It is a level expanse of open grass with a central drain. Two elements detract from the quality of the area. First, some of the boundary fencing could be replaced with types more suited to the character of the area. Second, the rural atmosphere of Coe Fen and Sheep's Green is disrupted by traffic noise from Fen Causeway. This road was completed in 1926 in an early attempt to relieve Cambridge's traffic problems by providing another river crossing. It divides Coe Fen and Sheep's Green in two. The actual treatment of the road, with its low grass embankments, is as satisfactory as is possible in the circumstances. The bridges, however, are architecturally uninspired, and the raised road level distributes traffic noise over a large part of the surrounding open space.

The problems of road noise and visual intrusion could be lessened by more intensive planting along the lines of the old water-courses. This would also serve to tie together more definitely the two halves of the open space.

North of Fen Causeway, Coe Fen continues, but its general appearance becomes more urban due to the fringe of buildings on its eastern edge. In particular, the 1930's Engineering Laboratories are architecturally poor and the Fen would gain if selective tree planting could be undertaken to act as a foil. By contrast, the long sixteenth century wall of Peterhouse Grove and the trees behind it are a good visual edge, but on the east side the boundary hedging should be encouraged to grow to about ten feet to screen the greenhouses and car parking associated with the Garden House Hotel, which are very intrusive.

The northern part of Sheep's Green is similar in character to the southern part but has more trees, and consequently the interplay of light and shade is more noticeable. The embankments to the Newnham Mill Stream and the main river are dominant elements giving a positive edge to the area and defining its form. The white painted post and rail fences on the footpaths over the old water-courses form a pleasant punctuation in the landscape. Newnham Mill Pool, the surrounding buildings and the bankside willow trees form a delightful feature on Sheep's Green, and the one poor group of structures associated with the Granta Public House are to be improved to give better access to the water's edge. This will enhance the visual quality of the area still further.

Sheep's Green

North of Sheep's Green, Laundress Green, the main Mill Pool and the adjoining buildings together form one of the most important parts of the river environment in the City. The contrast between the buildings which come down to the water's edge and the open spaces of Laundress Green and Sheep's Green is visually pleasing and is enhanced by the liveliness of the river itself. The mill race marks the site of the King's and Bishop's Mills, which existed in Norman times, and joins the upper and lower rivers.

Newnham Mill pool and the Malting house

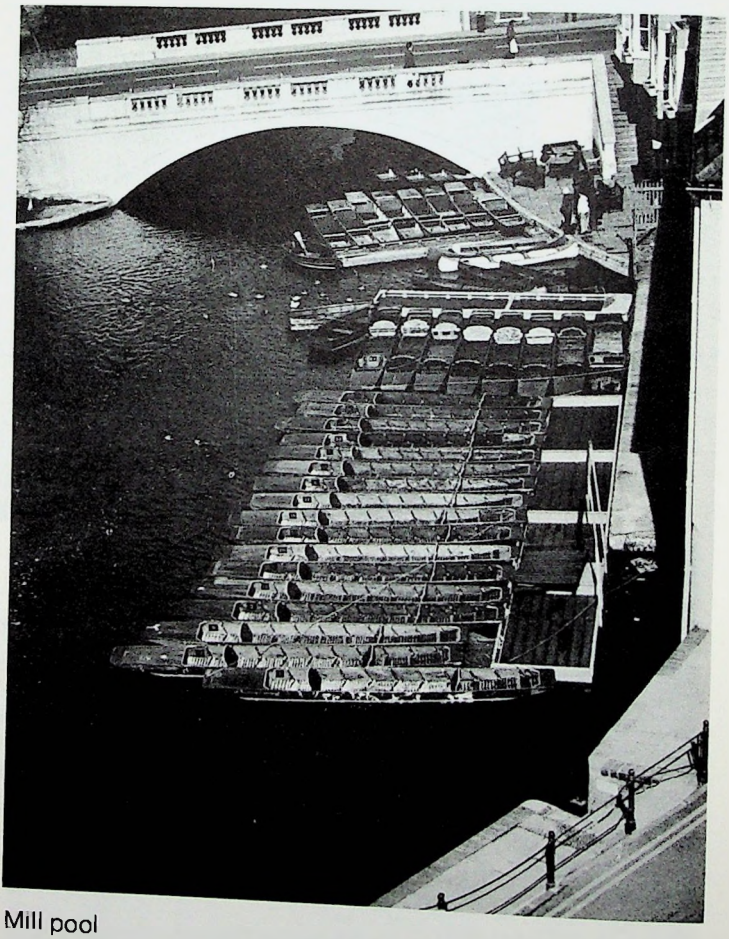
Like all rapidly moving water, it has power to attract people to the area so that the bridge across it and Laundress Green are both heavily used in the good weather as a meeting and picnicking place, and as a large outdoor bar for the Mill Public House, which is one of the few Cambridge pubs which front on to the river. In the summer there are also crowds of people using the main punt hiring stations, one for the upper river in front of the Graduate Centre, and two for the lower river in the Mill Pool itself. The scene is therefore one of constant bustle and activity, in contrast with the more tranquil stretches of the river on either side.

The river frontage from Sheep's Green

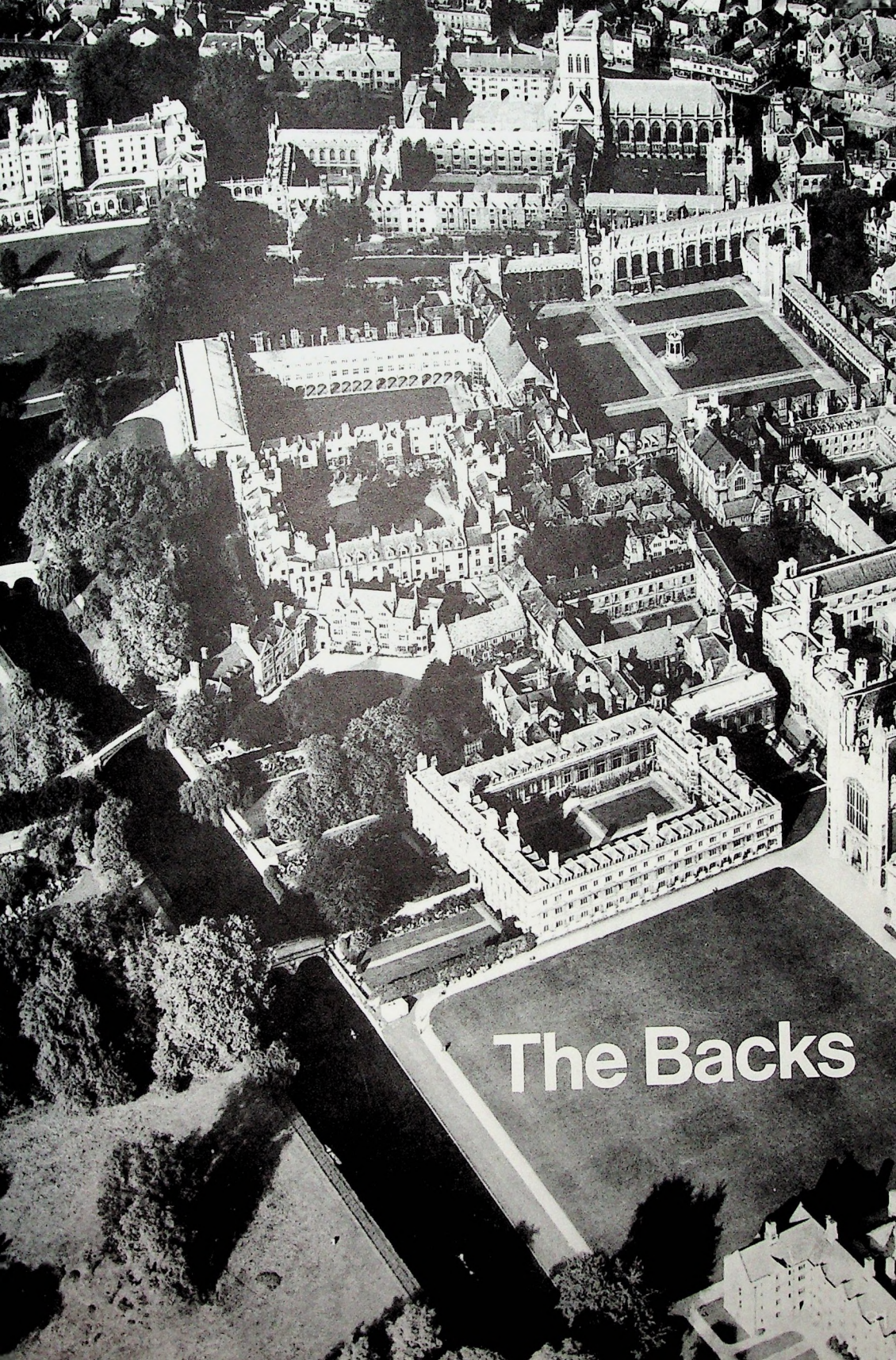
The heavy usage brings some problems, however, not to the hard paved areas, but to Laundress Green where the banks are badly eroded. Some well considered method of bank stabilisation should be undertaken to prevent further erosion without alteration to the basic character of the Green.

It is unfortunate though necessary that Granta Place must remain open to traffic to serve the Graduate Centre and the Garden House Hotel, but nevertheless this does not preclude some treatment of the area in the future to ensure pedestrian domination.

On the north side of the Mill Pool, Silver Street Bridge with its long western abutment marks a very definite break in the riverscape, north of which the collegiate atmosphere of the Backs begins.



Mill pool


The Backs

N
Bin Brook
Kings Garden Hostel
Clare College Memorial Court
Barrett's Walk
Queens Road
Harvey Court
West Road
Madingley Road
Westminster College
Wilderness
Clare Hall Piece
Garden
Queens Green
Queens Road
Pound Hill
Bin Brook
Cripp's Building
Garret Hostel Br.
Trinity Br.
The Backs
Kings Br.
Clare Br.
The Backs
The Grove
Fisher Ct.
Darwin College
Bodleys Court
Clare College
Garden
Trinity Hall
Wren Library
New Ct.
Northampton Street
Queens Br.
Queens College
Garden
Great Lawn
King's College
Neviles Court
St. John's Old Br.
New Court Br.
Magdalene Street
Laundress Green
Mill Pool
Boat Hire
Silver Street Br.
Cam
Boat Hire
Gibbs Building
Trinity Lane
Old Schools
Great Court
Garden
St. John's College
Queens Lane
Silver Street
Mill Lane
St. Catherines College
First Court
Trinity College
Magdalene Br.
Boat Hire
Quayside
River Cam
Chapel
Senate House
Gonville & Caius College
Kings Parade
Trumpington Street
Senate House Hill
St. John's Street
Trinity Street
Bridge Street
Thompsons Lane
Little St. Mary's Lane
Pembroke Street
Pembroke College
Corpus Christi College
Bene't Street
St. Edward's Passage
St. Mary's Passage
St. Mary's Street
Rose Crescent
Green Street
All Saints Passage
Round Church Street
Portugal Place
The Backs
Location Plan
0 50 100 metres
0 100 200 300 400 feet

N
The Backs
Analysis Plan
0 50 100 metres
0 100 200 300 400 feet

The Backs, which stretch from Silver Street to Northampton Street, are significant as one of the most beautiful groups of formal and semi-formal riverside open spaces in the world, and add immeasurably to the quality of Cambridge as a University City.

King's Backs

Their historical development is interesting. In the Middle Ages it would appear that the main course of the river was further west than at present, and followed the line of drains which run parallel to Queen's Road. The colleges gradually extended westwards from King's Parade and Trinity Street, and in so doing had to drain and artificially build up the marshy river land, emphasising the present course of the river and leaving the old course and new drainage channels as deep cuts in this artificial plateau.

Much of the beauty of the area derives from the irregular growth of the colleges. Buildings of different periods and contrasting styles and materials stand side by side, either rising directly from the river or grouped around spaces of varying size, in contrast to the formal street facades on their eastern boundaries. The street facades were, of course, the fronts of the colleges, and the river side their backs, hence the origin of the name for the area.

Another factor which enhances the beauty of the area is the great variety of ways by which it is possible to approach the river. From the town these approaches are normally through the college complexes. Both at Queens' and St. John's the approach is through a sequence of courtyards, and it is not until one is actually on the bridge over the river that there is any awareness of the river's presence or the open spaces beyond. In contrast, through King's College one is aware of the space beyond the Gibbs Building from the street frontage and the panorama gradually unfolds. The approach through Trinity and under the Wren Library falls between these two extremes, but in each and every case the contrast between the building complexes with their internal spaces, and the major open space of the Backs is exhilarating.

The library and footbridge at Trinity College

Trinity bridge and New Court

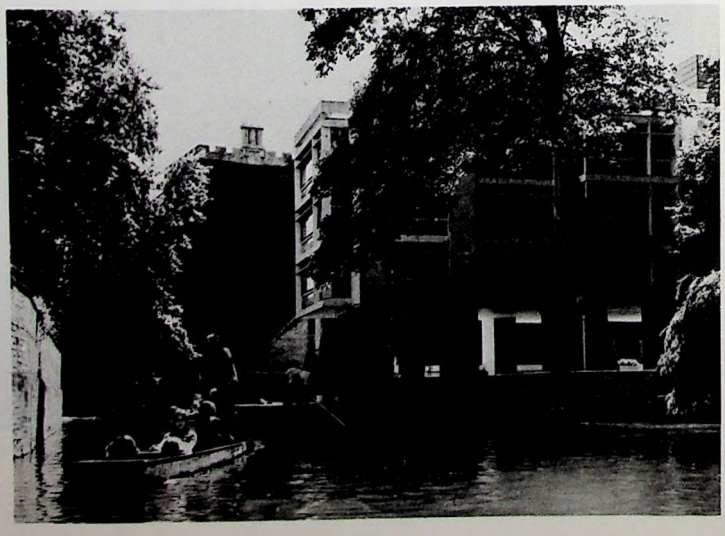
Moreover, except along Queen's Road, it is not possible to walk far along the river without having to make a diversion through the college courtyards. It has often been suggested that the creation of a footpath along the west bank of the river would be desirable, but it is felt that this would merely duplicate the present route along Queen's Road and would not add to the total enjoyment of the river environment. The only extra link which could be added to the existing footpath network is one between the Grove of Queen's College and Queens' Green. A footbridge existed here in the past so there is a specific historical precedent for such a facility.

From Silver Street and Northampton Street the approaches are quite different. The sense of space is already present and gradually builds up until the whole scene is spread out with the open spaces nearest and the college buildings viewed through trees forming a magnificent backdrop.

One factor which enhances the attractiveness and beauty of the area is the consistently high standard of environmental detailing. Many of the best features are listed as being of architectural interest, notably the excellent gates in wrought and cast iron leading to the individual colleges. Of these, the Clare College gateway on the west side of Clare Bridge, and the St. John's and Trinity gates to Queen's Road are fine examples of early eighteenth century wrought ironwork.

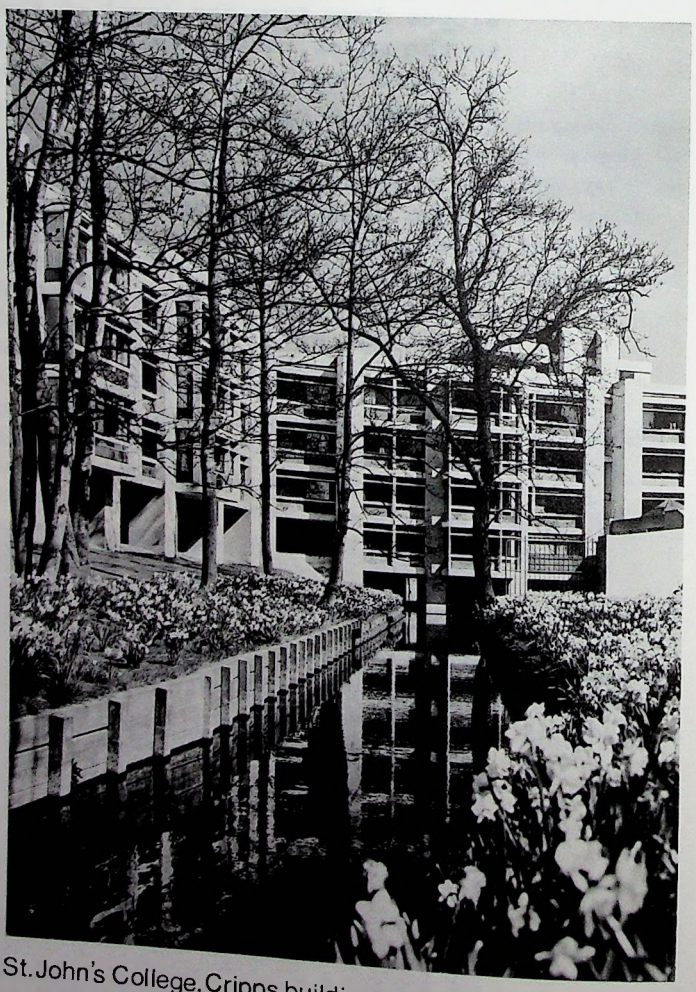
The treatment of paths is also interesting, particularly in the way that their edges are detailed. One of the best examples is the path across King's Backs, which was laid out in the nineteenth century. Here, stone flags mark the actual pathway and the edges are set in pebbles which serve both to assist drainage and to deter people from walking on to the rough cut grass margins. Other paths are simply treated in gravel with the grass on either side raised an inch or so for ease of maintenance. Embanking is also well considered in all cases, and the variety of treatment is visually pleasing. At King's College, for example, a maintained grass bank slopes down from the level of the great lawn to the water, making an ideal sitting place in the good weather from which to enjoy the river activity.

The Cripps Building of St. John's shows that modern treatments are equally acceptable. The wing nearest to the river is open at ground level and leads down to the water's edge in a series of steps and platforms creating places to sit and watch the river with the result that it is used extensively in the better weather as an informal meeting place. So many architects, given this opportunity, choose to ignore the fact that people like to sit directly by the water's edge if at all possible.



St.John's College, river frontage

Another feature which adds to the charm of the Backs is the subtle variations of ground texture between one area and another, ranging from the immaculately maintained lawns of King's to the rough meadowland of Queens' Green and the Grove. Often a strip of longer grass borders the paths under an avenue of trees, with formal lawn beyond. In this rougher grass bulbs have been established, and in spring the flowers produce a beautiful carpet of colour.



St. John's College, Cripps building

Contrasting again with the open lawns and meadows are the fine college gardens, most of which are open to the public at certain times. These are often laid out behind enclosing hedges, thus giving another change of visual scale.

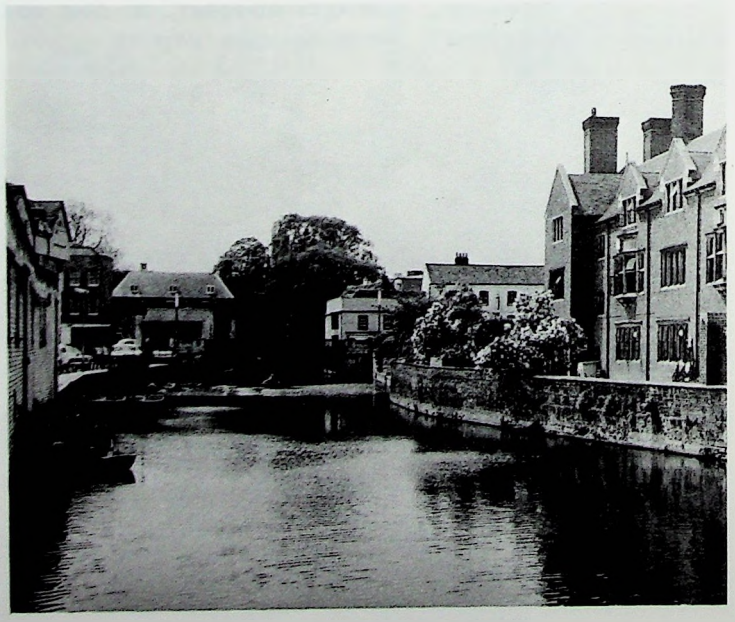
Finally, there is a fine collection of trees, with formal avenues along the college paths and more general cover in other areas. Undoubtedly, the quality of the Backs resides mostly in the interplay between buildings, water and landscape, but this is made the more beautiful by meticulous care and constant maintenance. In general terms it is felt that any changes should be most carefully considered and only undertaken if absolutely essential. Two things only detract from the total picture, first the intrusion associated with moving and parked cars in Queen's Road, and second, the bad state of the railings along Garret Hostel Lane. It is hoped that both problems can be solved to the benefit of the area as a whole.

Trinity bridge from Garret Hostel Lane

Quayside

The historic entrance to the City from the north down Castle Street and Magdalene Street, follows the approximate line of the Roman Via Devana and leads to what was once the northern-most crossing point on the River Cam, roughly where Magdalene Bridge now stands. Originally the crossing was a simple ford, but during Anglo-Saxon times a bridge was constructed linking the two banks.

The bridge has been replaced many times, the present one being a locally designed cast iron structure dating from the early nineteenth century. Recently there has been much discussion as to whether the bridge needed replacement yet again, but happily it has been found possible to strengthen it sufficiently to take the limited future traffic load. From the bridge the river environment is visible from St. John's College at the northern end of the Backs as far as Chesterton Road opposite Jesus Green.



Magdalene bridge and Quayside

On the western side of the bridge, the atmosphere is still collegiate, although buildings come down to the water's edge and enclose the river. Two elements are most significant in the view. First the splendid willow trees in Magdalene's grounds which form an enormous green canopy for many months of the year and cast a large shadow over the water as it curves towards the bridge. Second is the sculptured and clearly detailed wing of the Cripps Building of St. John's College mentioned earlier.

On the eastern side of the bridge lies Quayside, the last link with Cambridge's history of river commerce. The last tugboat ceased to operate in the nineteen thirties, but the area still has an atmosphere of commercial activity - although in reality this is restricted to boat hiring facilities. The good quality of some of the detailing in Quayside, and the potential offered by old commercial buildings in Thompson's Lane suggest that this whole area could be the subject of an imaginative plan for revitalisation, and one suggestion for this is put forward later in the report.

Quayside

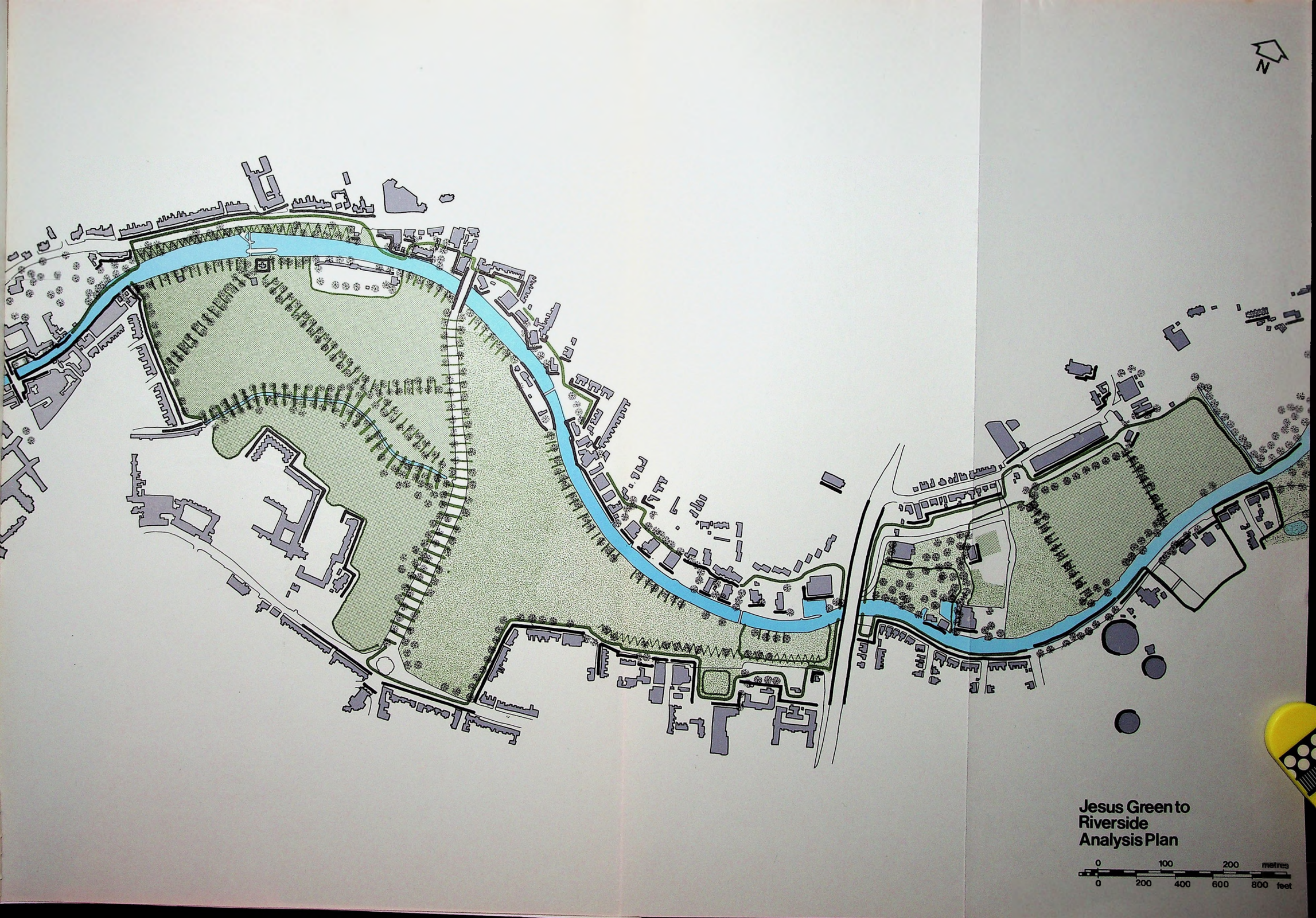
On the opposite bank is the river court to Magdalene College, which is in direct contrast to the commercial flavour of Quayside. It is perhaps unfortunate that the fine fifteenth century river front of First Court is seen above a platform of parked cars.

At the eastern end of this part of the river a heavy belt of trees, partly in the rear gardens of houses in Chesterton Road and partly on Jesus Green, terminates the view.

The Quay

Jesus Green and Midsummer Common

N
Chesterton
Church Street
Pye Telecommunication Works
St Andrew's Church
St Andrew's Road
Pye's Playing Fields
River Cam
New Pumping Station
Pumping Station
Sturry Road
Gasworks
Chadder's Lane
Riverside
New Road
Elizabeth Way
Elizabeth Bridge
Footbridge
Bahhams Boatyard
Acretield Drive
College Boathouses
Midsummer Common
Victoria Avenue
Victoria Bridge
Jesus Green
Jesus Lock
Footbridge
Lock House
Swimming Pool
Playground
Bowling Green
Tennis Courts
Magdalene College
Quay Side
Park Street
Jesus Close
Jesus College
Jesus College Playing Field
Wesley House
All Saints Church
Jesus Lane
Butt Green
Four Lamps
Maids Causeway
Short Street
St John's Street
Bridge Street
Chesterton Road
Alpha Road
Albert Street
Croft Holme Lane
Trafalgar Road
Pretoria Road
Kimberley Road
De Freville Avenue
Belvoir Road
Brunswick Terrace
Parsonage Street
Auckland Road
Brunswick School
Abbey Road
Priory Road
Saxon Road
Ruskin Road
Newmarket Road
Jesus Green to Riverside Location Plan
0 100 200 metres
0 200 400 600 800 feet


N
Jesus Green to
Riverside
Analysis Plan
0
100
200
metres
0
200
400
600
800
feet

As the river flows eastward from the end of Thompson's Lane the character of its surroundings changes markedly. On the north side it is hemmed in by a steeply sloping bank up to Chesterton Road. The noise from the road is very pervasive and additional shrub planting at the top of the bank could help to alleviate this, and would also screen the visual impact of the traffic. The bank has some good trees, especially willows, and is much used for fishing. This has led to the wearing down of several informal paths which tend to detract from the quality of the area. The houses and office block along the north side of Chesterton Road are large enough to create a visual backdrop, although they are architecturally mediocre.

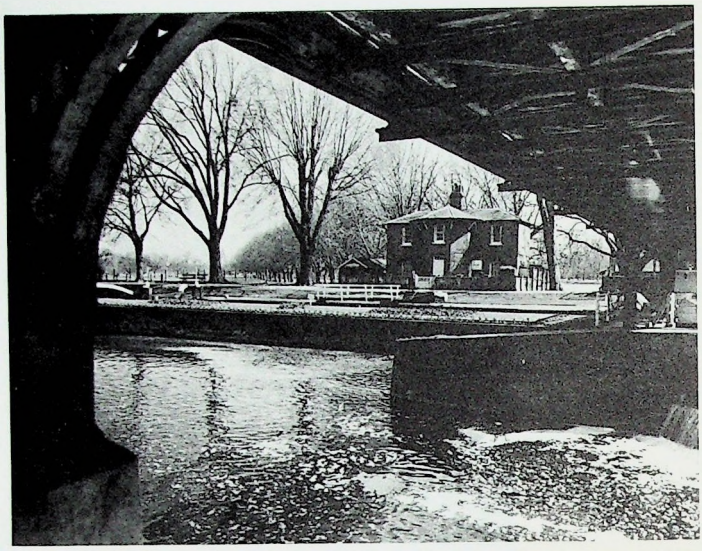
Chesterton road from Jesus Green

On the south side the atmosphere is totally different with long views out over the park-land of Jesus Green. The edges of the Green are visually defined partly by houses along Park Parade and Lower Park Street, and partly by the coppice on the edge of Jesus College's grounds. The latter boundary is particularly appropriate in that an old ditch line acts as a ha-ha in the eighteenth century tradition with the grounds up at a higher level so that North Court and the spire of All Saints, Jesus Lane, are seen between the boles of the trees.

Immediately adjacent to the river is a pleasant path with a line of mature trees. This is the start of a walk which goes right through on the south side to Stourbridge Common, and, by crossing the river at Chesterton, on to Fen Ditton, Baits Bite lock and Waterbeach, a distance of some 5½ miles.

To some extent, however, Jesus Green turns its back on the river which should be one of its greatest assets, for along most of the river frontage are placed recreational uses which make no use of their riverside setting. In particular, the bathing pool is completely screened from the river by the changing rooms which are placed close to the path and thus create a wide area of asphalt of very little visual attraction. Similarly, the fencing around some of the areas leaves much to be desired. Any long term plans for the reorganisation of activities should bear this in mind and could aim to make more of the immediate environs of the river walk available for those things which would benefit from proximity to the water.

In the centre of this complex of facilities, however, is the delightful feature of Jesus Lock itself. Its simple functional architecture, the pleasant iron footbridge and the Regency lock-keeper's house creates a visually attractive group whose setting is enhanced by the avenue of mature plane trees which lead to it from Victoria Avenue. The lock, with its weir and change of water level also marks the upper limit to which powered boats use the Cam and, as if to emphasise this point, there are usually a few craft moored against the northern bank which add an extra dimension to the river activity.



Jesus Lock

Jesus Green is divided from Midsummer Common by Victoria Avenue. A good line of trees and simple cast iron railings divides off the road from the surrounding open spaces. Like Fen Causeway the road is embanked above the surrounding level, so that traffic is very noticeable.

Just at the point where steps lead down to Jesus Green from the Victoria Avenue Bridge, action needs to be taken to improve a very poorly detailed area suffering extreme wear.

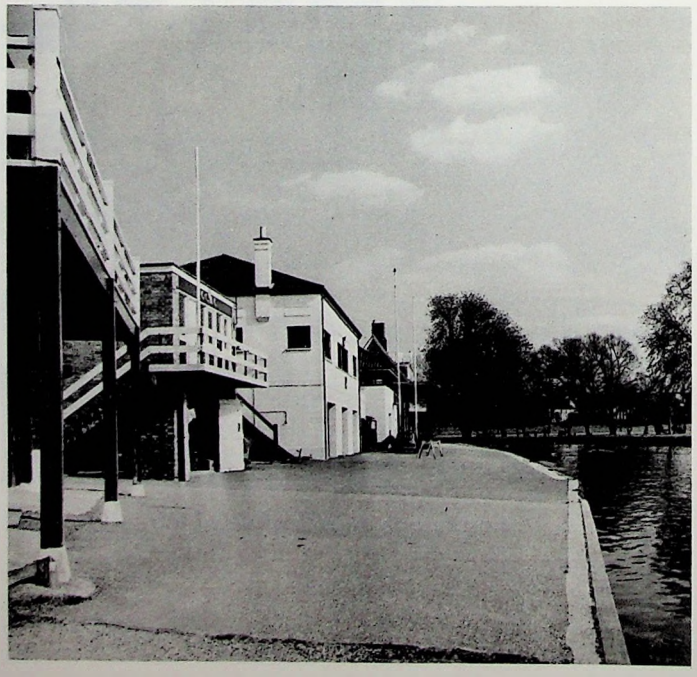
Beyond Victoria Bridge is another of those changes of environment which characterise the River Cam. Midsummer Common, on the south side of the river, is an open natural grassed area used both for grazing and as the venue for travelling fairs and exhibitions. Its openness is emphasised by the virtual absence of trees, except along the riverside walk, and the consequent long views to the houses of Maid's Causeway and Brunswick Walk.

Midsummer Common

The only feature which interrupts this openness is the group of buildings adjacent to the footbridge, which includes the Fort St. George, a delightful public house dating from the sixteenth century, and a very popular meeting place especially in the summer. The footbridge is less than satisfactory, its massive concrete approaches quite out of scale with the surroundings and also with the iron span.

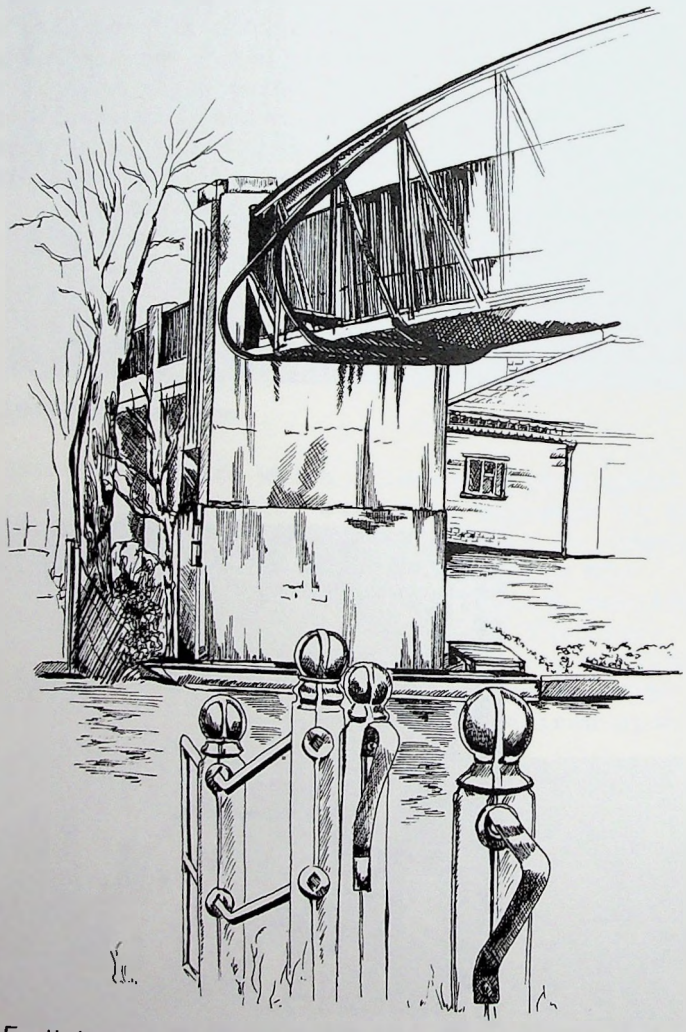
Fort. St. George public house

The north bank of the river throughout its length in Midsummer Common has become over the years almost the sole province of the college boathouses. These form the dominant element in the environment. The variety of their siting and the mixture of architectural form and material gives them individual character within an overall functional whole. In front of the boathouses there is no bank, but rather a set of wide aprons sloping gradually into the water, and this gives the river the appearance of being wider than it is. The whole bank is an area of great activity both on the aprons and in the water with college and town crews practising and exercising with much shouting and splashing.



Boathouses facing Midsummer Common

Towards the eastern end of the Common the river starts to curve away northwards and the open space is pinched between the backs of the premises along Newmarket Road which are on the top of a steep embankment, and the river.



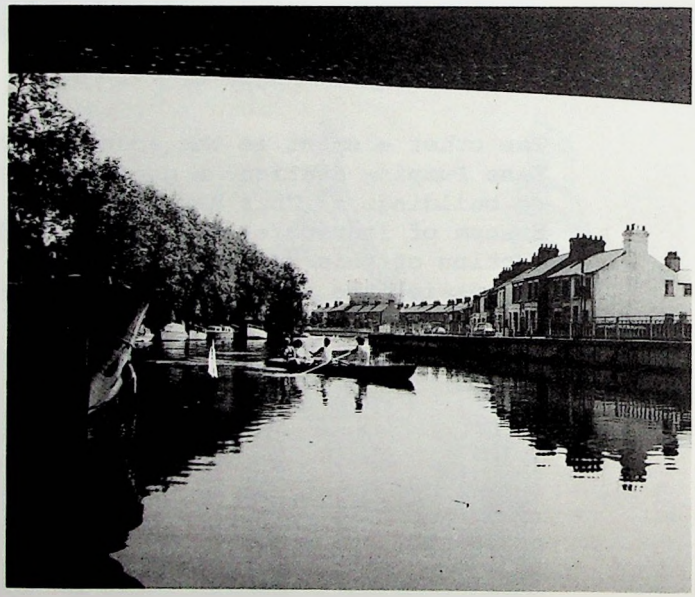
Footbridge to Cutter Ferry Path

The environment at this point has been disrupted by the construction of Elizabeth Way. Although the road has alleviated some traffic problems, the design of the structure is less than satisfactory. Its scale and the materials used are out of character with the intimacy of its surroundings, and its worst feature, without doubt, is the massiveness of the long, bland abutments on either side. The possibility of softening the impact of the bridge by further tree planting should be investigated.

Jesus Lock

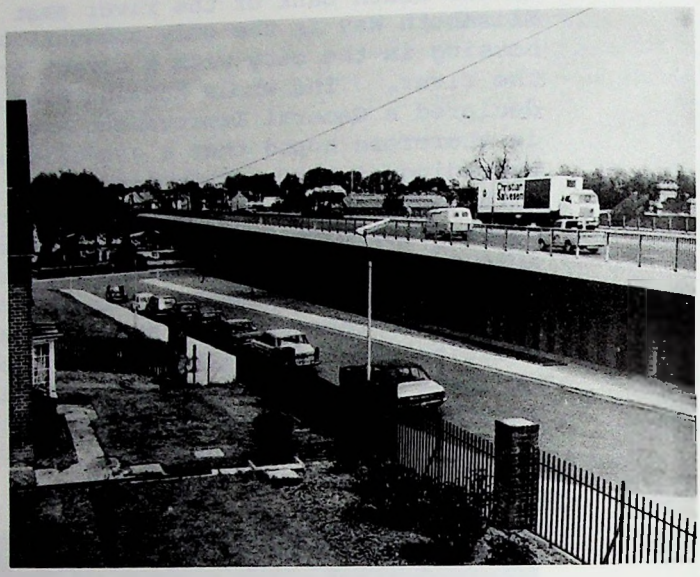
Riverside

On the south bank of the river east of Elizabeth Way is the only substantial area of housing in the city with a direct frontage to the river. The whole housing area has been declared a General Improvement Area, and it is therefore hoped that a significant upgrading of the environment can be achieved with time. The housing is built around a concave curve of the river which throws it into prominence. Most of the houses were built in the early years of this century and are not in themselves of any great merit, but positive external treatment by householders of their property and their front gardens, together with further local authority action to improve the riverside walk, could make the whole area much more attractive.



Riverside

The view is dominated to the west by Elizabeth Way Bridge, and to the east by the gasholders. Many of the gasworks' installations have been demolished with the introduction of natural gas and a large area of the site is available for development It is imperative that new proposals for the area should be seen in relation to the housing area, and thus be on a human, not an industrial scale.

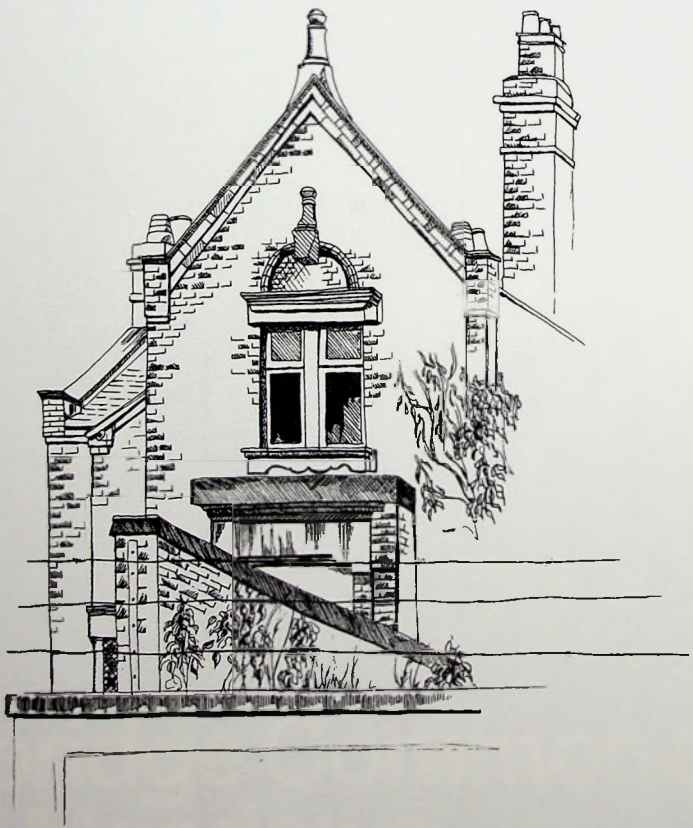


Elizabeth bridge

The other element in the scene is Cheddar's Lane Pumping Station, a good Victorian group of buildings. This has been taken over as a Museum of Industrial Archaeology and a later section of this report puts forward ideas for increasing the scope of its activities.

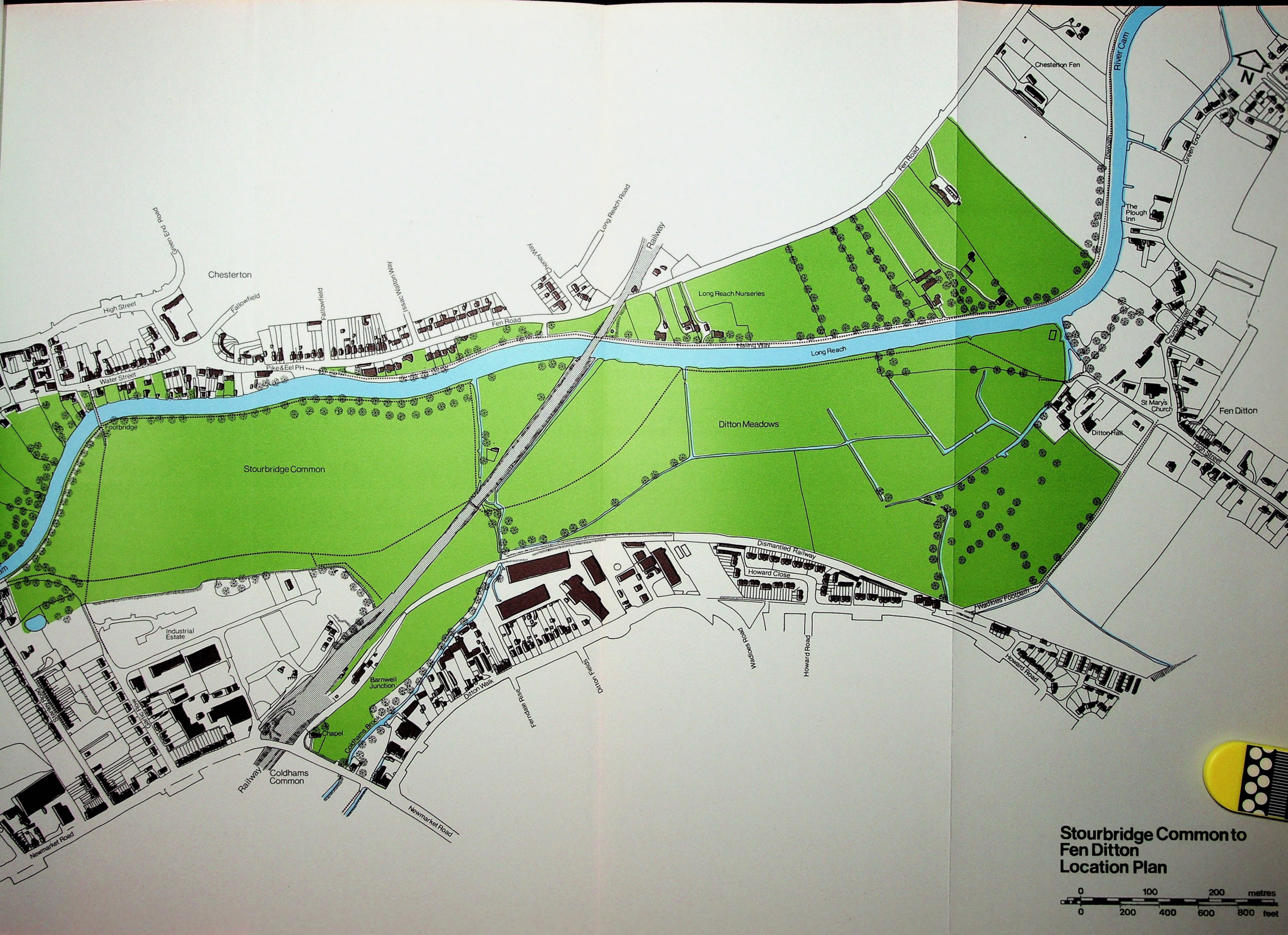
Cheddar's Lane Pumping Station

The north bank of the river is at present open for much of its length, and certainly the continued use of a large portion of it for playing fields will ensure that the long views over to Chesterton remain. New development is proposed here, however. A private housing scheme is being considered, which makes admirable use of the riverside location by providing small marina facilities and private moorings for the houses. This increase of waterside activity will do much to enhance the river environment.



House at Cheddar's Lane

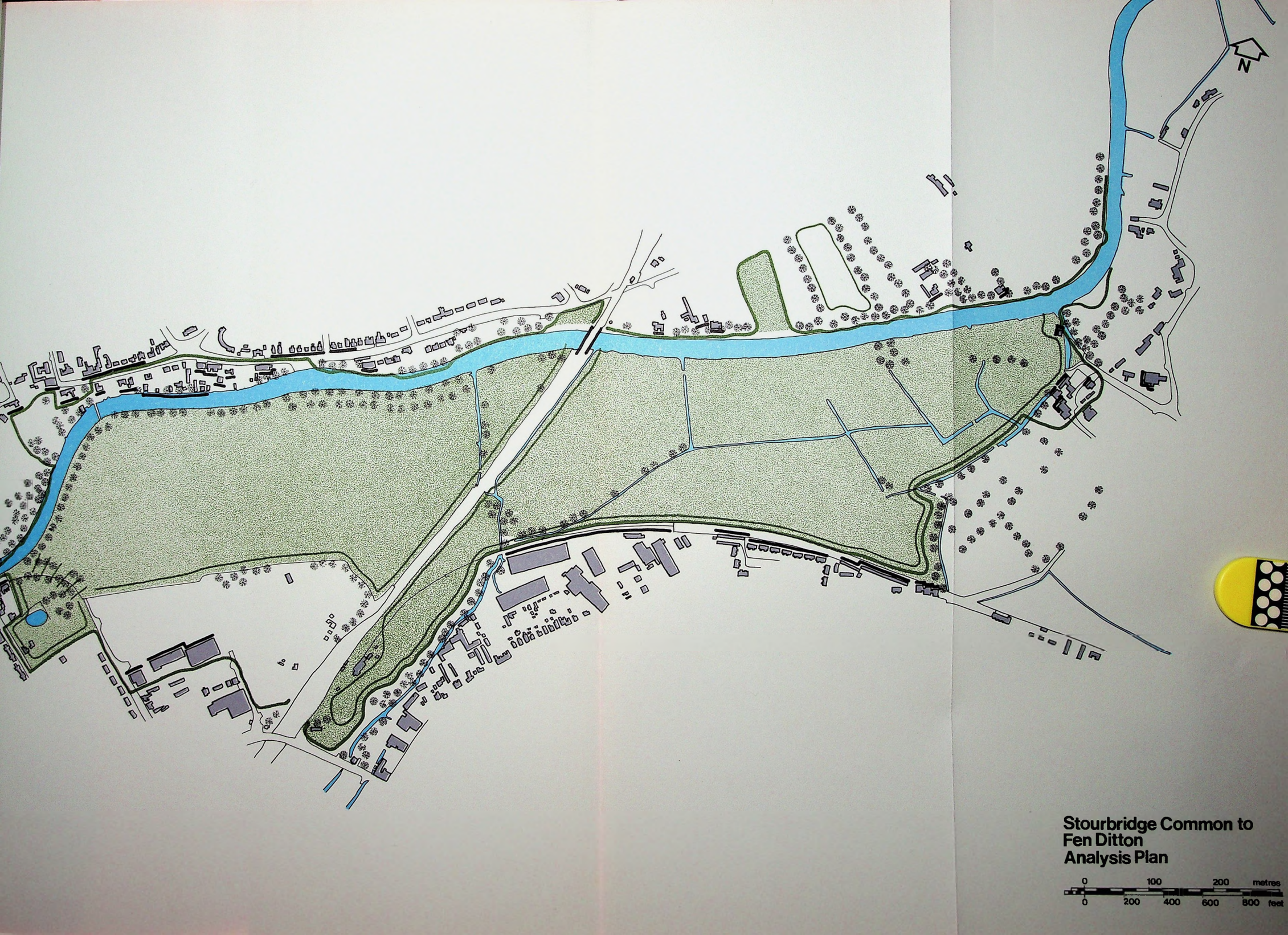
Stourbridge Common and Ditton Meadows



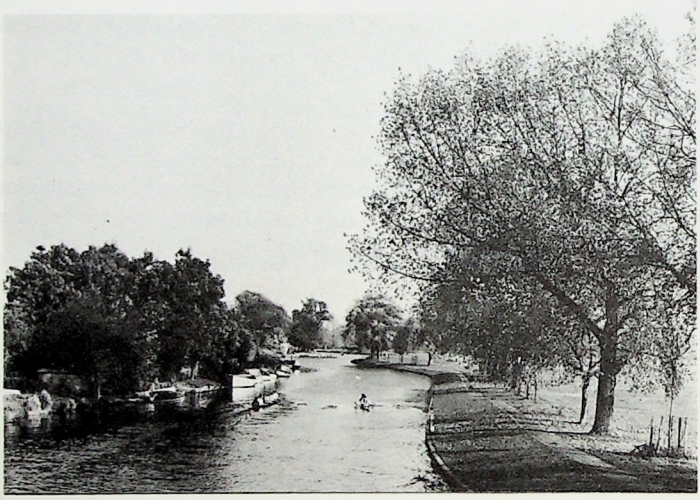
Stourbridge Common to Fen Ditton Location Plan

0 100 200 metres

0 200 400 600 800 feet


N
Stourbridge Common to
Fen Ditton
Analysis Plan
0
100
200
metres
0
200
400
600
800
feet

Stourbridge Common and Ditton Meadows act as a green wedge bringing virtually natural water meadows into the built-up area of the city. Unlike Sheep's Green and Coe Fen which perform the same function south west of the city, Stourbridge Common and Ditton Meadows are only used by the public to a limited extent, except during the boat races. Their situation, however, makes them of critical value if the centre of population gravity in Cambridge continues to shift towards the east.



Stourbridge Common

The entry to Stourbridge Common from the end of Riverside is pleasant. A row of mature trees along the riverbank, strengthened by recent planting, and a good path follow the curve of the river with the common lying behind. Apart from these riverside trees, the rest of the area is relatively bleak. On the south side the Garlic Row Estate, which is at a higher level than the rest of the common, is beginning to intrude visually and there is an urgent need to establish a substantial tree and hedge screen along the boundary to minimise this intrusion and to act partially as a windbreak. Similarly the railway embankment which divides the common from the meadows could be visually softened by further belts of tree planting.

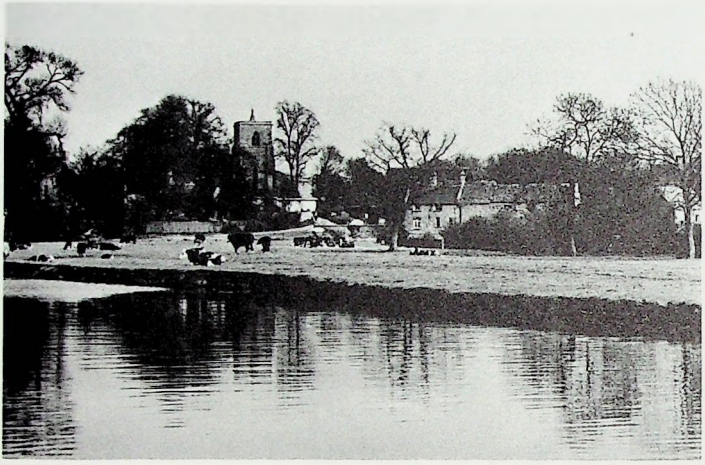
The riverside path dies away half-way along the Common and the only access between it and Ditton Meadows is by way of a substantial detour away from the river and over the railway. Plans have been put forward for continuing the riverside towpath under the railway bridge and this would be a significant improvement.

Ditton Meadows are less bleak than the Common, largely because the area is divided up with hedgerows and trees. Again, however, the houses of Ditton Estate and the commerical uses of Ditton Walk need further screening if the pastoral atmosphere of the area is to be maintained and enhanced.

Some scope exists for the improvement of the Conservation Area in Chesterton on the north bank of the river. The footbridge here is unsatisfactory in design with its massive concrete ramps.

Pike and Eel public house

Eastwards from this, residential development backing down to the river with its variety of sheds, boat moorings and general paraphernalia does not enhance the river environment, and little has been made of the location's innate possibilities.



Fen Ditton

The best feature of the area is the towpath walk which starts by the Pike and Eel Public House and continues uninterrupted along the banks of the Cam all the way to Waterbeach. This is lined throughout most of its length with closely set pollarded willows which create a real water's edge atmosphere.

There is much potential in this whole area which has yet to be realised and it is considered that sympathetic treatment, mostly in terms of good landscaping proposals, could make it attractive, helping to relieve the pressure on other over-used parts of the river in the long term.

The river turns sharply north at the eastern end of Ditton Meadows and the vista is terminated by the group of buildings and trees which sit on the hill at Fen Ditton. Beyond this point the environment becomes completely rural and the river Cam runs on a further twelve miles through the countryside to join the Ouse at Upware.

Bridges

The bridges over the Cam give some idea of the development of bridge design during the last three and a half centuries. This section describes some of the more important examples in chronological order.

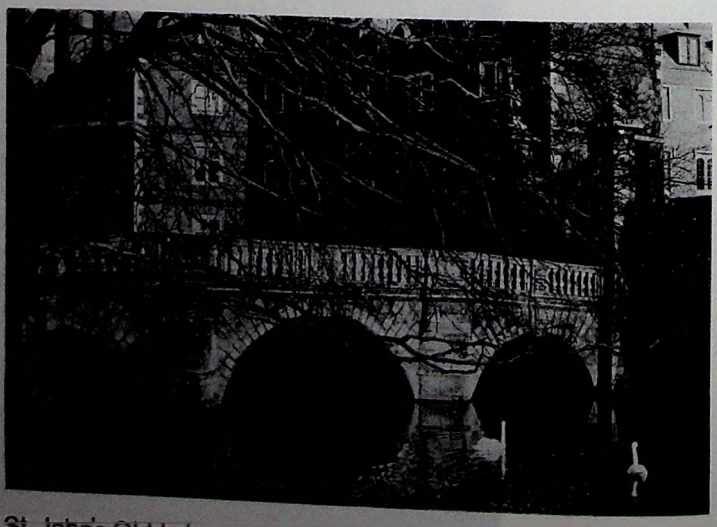
Cambridge owes its existence to the importance of the ford crossing of the River Cam, which also marked the upper limit of the navigable section of the river in the thirteenth and fourteenth centuries. Beyond this there was only barge traffic, towed by horses. Either side of this ford the extensive flood plains made further crossing difficult and approaches precarious.

By the eighteenth century the river course had been more closely defined as a result both of Fen drainage, with the consequent provision of sluices and control over flows, and also of the encroachment of the built-up area into the flood plain of the Cam. Magdalene Bridge (the Great Bridge) became accepted as the upper limit of navigation. Coupled with this came a recognition by the Colleges of the value of their lands on the west bank and their desire to draw them into their sphere by bridging the river.

Clare bridge

Clare Bridge is the oldest surviving bridge spanning the River Cam. Built in 1638-40, it was constructed primarily to permit the passage of building materials to the College reconstruction begun in the same year. It is built of Ketton stone ashlar, with triple spans surmounted by a distinctive balustraded parapet with carved panels. On top of the balustrade are thirteen and three-quarter stone balls. It was probably designed by the local stonemason Thomas Grumbold, who was paid three shillings for a drawing of it. It is often said that the fourteenth stone ball was left unfinished by him to register his dissatisfaction with so small a fee.

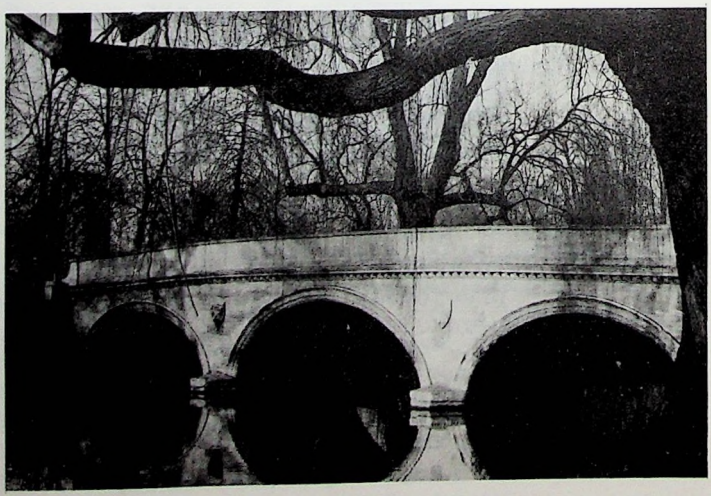
The next oldest bridge after Clare is the Old Bridge of St. John's College. Built in 1709-12 by Robert Grumbold, it replaced an earlier wooden structure. Both Wren and Hawksmoor had previously been concerned in its siting, recommending a position in continuation of the east-west axis of the three courts. It is built of Weldon stone and, like Clare bridge, is of three spans surmounted by a balustraded parapet with carved panels showing the heraldic arms of the College foundress and groups of figures, one of the latter being of 'Father Cam'.



St. John's Old bridge

The mathematical bridge of Queens' College was built by James Essex to designs by W. Etheridge, in 1749-50. The present bridge is a copy of the original and dates from 1906. It is the only remaining timber bridge over the river and is unusual in that all the timbers were originally joined together only by wooden pegs, much in the fashion of medieval craftsmanship.

Queens' College Mathematical bridge



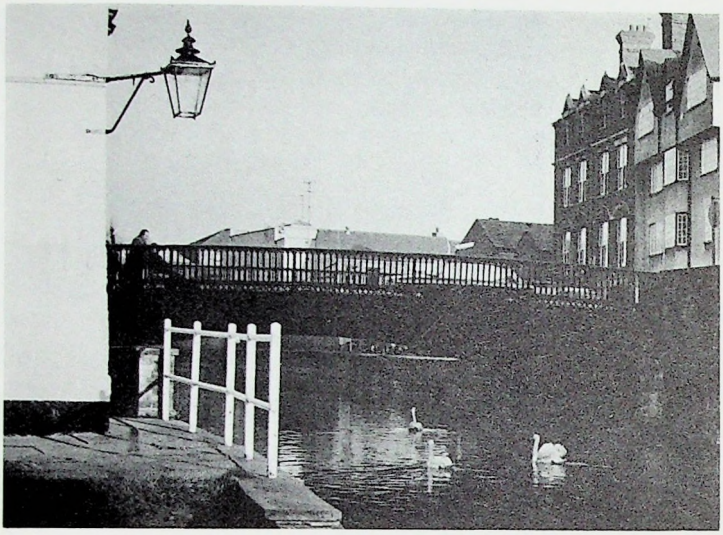
Trinity bridge

Trinity Bridge was built in 1763-5 by James Essex. It was erected from the bequest of Dr. J. Hooper of the College and bears his arms. One fine feature of its design is the way in which the balustrades ramp downwards to end in scrolls.

The earliest bridge at King's College, dating from 1472, was located axially to the Gibbs Building. The two tree covered mounds on King's backs are the remains of the old causeway which led to it. The present bridge was erected in 1818 to designs by William Wilkins, who also built the Hall range and the screen and gatehouse to King's Parade. It was the first stone bridge to be built of a single span.

King's bridge

In 1823 the traditional forms of construction previously employed for Cambridge bridges were discarded in favour of the new cast iron when Magdalene Bridge was rebuilt. The major elements of the bridge were cast in Derby but the smaller ones were cast locally, all to the design of Arthur Browne. It is of single span made up of eight triple hinged vertical ribs resting between ashlar abutments. All the elements are decorated with Gothic tracery.



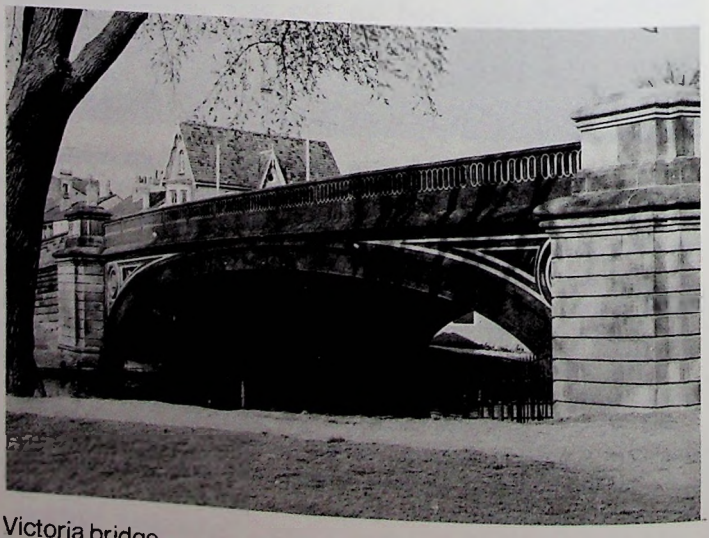
Magdalene bridge

In 1827 Henry Hutchinson designed a new bridge to link the old courts of St. John's College with New Court, thus implementing the original suggestion of Wren and Hawksmoor. It is known as the Bridge of Sighs and is loosely based on the bridge in Venice which links the Doge's palace and prison. It is designed in the Neo-Gothic style which was then becoming popular, and is unusual in being covered over.

In 1845 the railway system reached Cambridge and the Fens and a new, purely functional bridge was erected at Fen Ditton to carry it over the river. This was replaced by the present bridge in 1930 to permit the use of heavier locomotives and longer trains. It is a good sturdy piece of engineering which adds a dominant element to the river environment.

Railway bridge

The Victoria Bridge was constructed in 1889-1890, and with Victoria Avenue sought to relieve the even then heavily overloaded road system. It consists of elliptical steel ribs resting on stone abutments. The spandrels, which are made of cast iron, are decorated with the arms of the City and University.

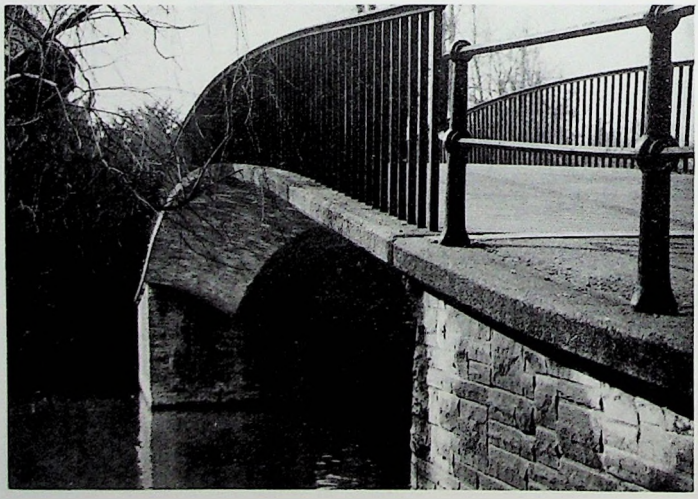


Victoria bridge

The construction of Fen Causeway was the second attempt by the City to relieve congestion on the road system. It was completed in 1926. The main bridge is not good in design terms, but manages to remain, luckily, almost hidden by trees.

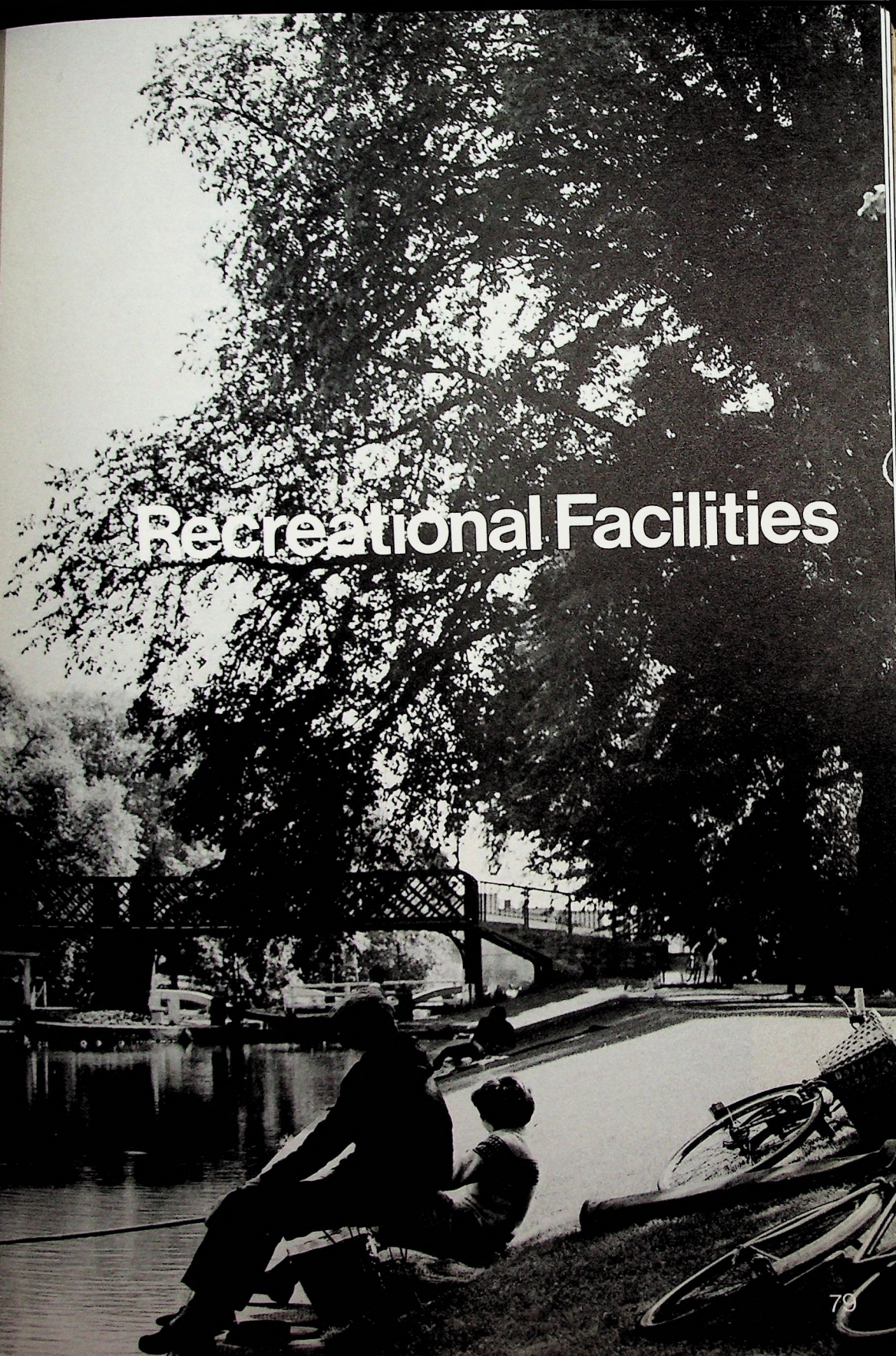
Silver Street bridge, although designed in 1932 by Edwin Lutyens, was not constructed until 1958-59. It replaces an earlier cast iron structure almost identical with Magdalene Bridge.

Garret Hostel Lane bridge, opened in 1960, is the latest in a long series of bridges across the river at this point, and replaced a very fine cast iron bridge built by a Cambridge foundry. In its elegantly soaring single span of 80' 0" and clean functional railings, it expresses boldly the current technology in bridge engineering and is a welcome addition to Cambridge's bridge architecture. It was designed by Timothy Morgan of Guy Morgan and Partners.



Garret Hostel Lane bridge

The most recent river crossing is the Elizabeth Bridge. It is a triple span bridge in post-stressed concrete.



Recreational Facilities

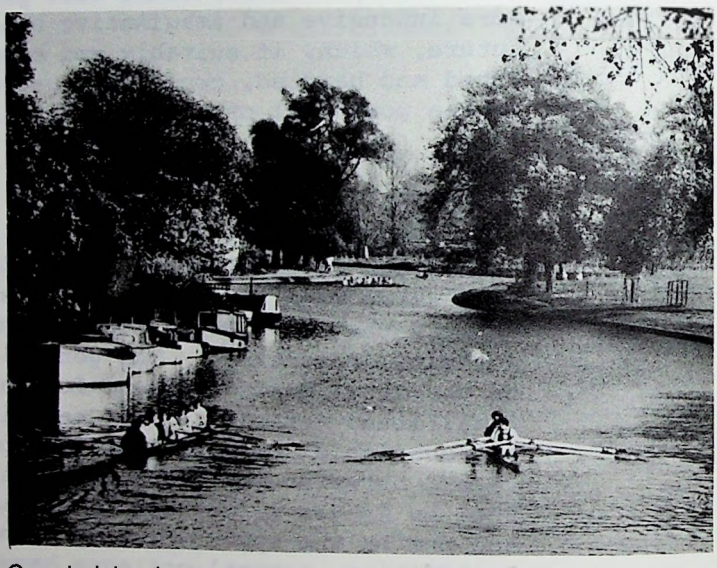
The River Cam and the open spaces which lie along its banks offer great potential for recreational activity. The amount of use which is made of public open spaces and their adequacy to serve the population is the subject of a more detailed planning report, and this study only looks at those activities which make direct use of the river, boating, walking, swimming and fishing. The gradual increase in leisure time and the growth of interest in new leisure and recreational activities, however, could well point towards more intensive and imaginative uses in the future, which, if suitably and sensitively sited and handled, could make use of the innate potential of the river and its surroundings.

Boating

The river Cam is extensively used for boating activities of all kinds. These fall broadly into three main categories. First, on the upper river above Jesus Lock the prime activity is punting. The general shallowness of the water makes it ideal for this traditional activity. The majority of punts are available for hire from four points on the river, three on the lower river at the Mill Pool by Silver Street and by Magdalene Bridge, and one on the upper river by Granta Place. In addition, several colleges have their own punts, and there are also some private punts of various shapes and sizes. On a good summer's afternoon the amount of activity is enormous and occasionally very noisy, but is very much part of the Cambridge scene.

Landing stage at Garret Hostel Lane

The second category of activity is rowing. Cambridge is recognised as a rowing centre and the river between Victoria Bridge and Fen Ditton is extensively used for training and competition. At present about a dozen competitions are held annually and some of these attract as many as a hundred crews, together with large crowds of spectators. Rowing is also a popular sport and no decline in the level of activity can be foreseen. During



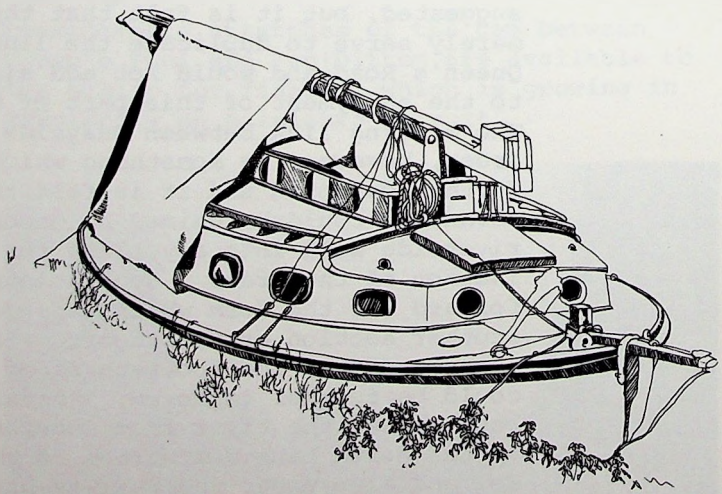
Crew training, Long Reach

the last few years proposals have been put forward for a specially designed 2,000 metre four lane rowing course downstream of Fen Ditton, but it is anticipated that this facility would only be used by the top crews, and that the remainder would continue to use the river for practice. This may lead to some migration of activity downstream and in the much longer term could release boathouse sites for redevelopment opposite Midsummer Common. The major problem which faces the rowing fraternity is competition for space between them and the pleasure cruising interests on the lower river. Foreknowledge of major rowing events usually has the effect of curbing cruising activities, but to a large extent the solution to the general problem lies in the development of mutual tolerance.

The third category of activity is that mentioned above, the development of pleasure cruising in powered boats. There is no doubt of the growing popularity of this leisure pursuit in the country as a whole, and over the last few years there has been a significant increase in the use of the lower reaches of the Cam by powered boats, especially by visitors who make Cambridge a point of call on a waterways holiday.

Whilst there is no express prohibition against the use of powered craft above Jesus Lock, it has been generally accepted that the activity should be confined to the lower river. At present there seems to be no need to make this mandatory.

Facilities for cruisers are considered to be adequate in terms of mooring space and toilet facilities. Water and fuel are available at Banham's Boat Yard. With the growth of the activity, however, the adequacy of facilities will need to be kept under review and should there be a need for further provision it should be easy to accommodate without detracting from the environment.



Only a small percentage of the power boat users cause any real problems on the river, usually by exceeding the speed limit of five miles an hour, which causes considerable wash and can lead to accelerated erosion of the natural banks, or due to lack of familiarity in the handling of their boats.

Walking

There exists along the River Cam an extremely good system of footpaths which make it possible to walk almost any section of the river between Byron's Pool and Fen Ditton. The environments through which the system passes are pleasantly varied from the completely rural atmosphere of Grantchester Meadows, through the collegiate area of the Backs to the urban quality of Riverside. This gives opportunity for a variety of leisure activities including picnicking, nature study and architectural appreciation.

In some places there are diversions from the water's edge. These have been studied to see whether it is possible to produce further links in the system which will alleviate the problem. There seems little possibility of linking the northern end of Grantchester Meadows with the footpath north-west of Paradise Island without causing some damage to the natural history potential of the area, so this idea should not be explored further. There is, of course, no complete footpath along the riverbank of the Backs, and in the past the creation of such a link has been suggested, but it is felt that this would merely serve to duplicate the link along Queen's Road and would not add significantly to the enjoyment of this part of the river. The missing link between Quayside and Jesus Green, however, is something which has been further explored and it is felt that positive advantage could be gained by incorporating a riverside walk into any plans for the revitalisation of the area. Suggestions are put forward for the form which this could take in another section of the report. It is also suggested that the footpath along Riverside could be further improved. Finally, a link both across the river from Stourbridge Common to the north bank downstream of the Pike and Eel and also under the railway bridge between Stourbridge Common and Ditton Meadows would be valuable both to walkers and to those who wish to view the rowing events and regattas which are held on this stretch of the river.

Apart from improvements to the system as a whole, there are detailed improvements which could be made by better detailing of the paths themselves, and by better provision of ditch crossings, stiles and seating. Proposals for these are put forward in the section of the report which deals with environmental detailing.

Swimming

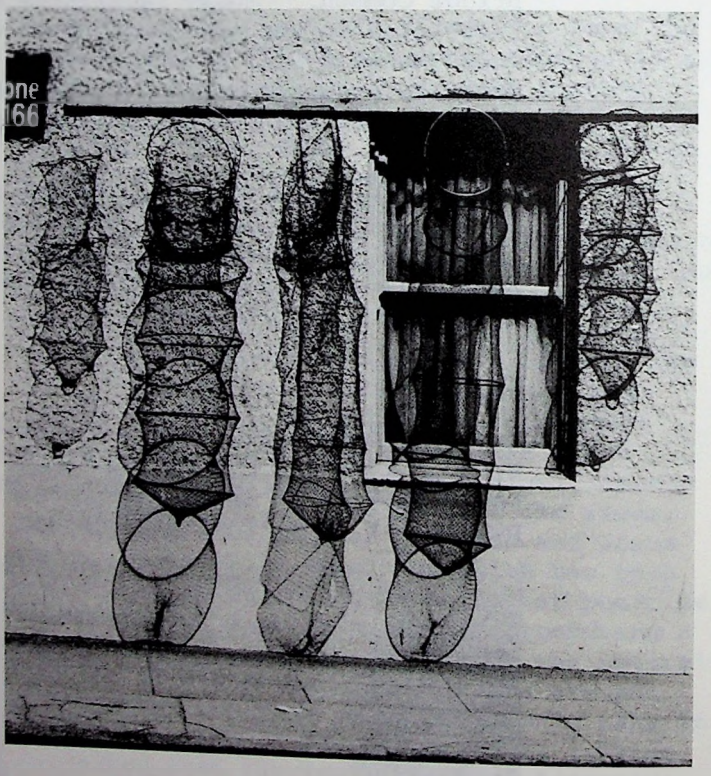
At one time river swimming was a popular practice. There were several developed bathing places and much informal swimming from Grantchester Meadows, Jesus Green and Stourbridge Common. Today facilities are restricted to the area just north of the point where Newnham Mill Stream diverges from the Cam, and an underused University Bathing Place at the north end of Grantchester Meadows.

The decline is due in part to the provision of other facilities in the City and also to the deterioration in the cleanliness of the Cam, especially in times of drought when there is little flow to the water.

Fishing

Considerable stretches of the Cam between Byron's Pool and Fen Ditton are available to the public for fishing, which is growing in popularity as a leisure pursuit.

The most popular areas are from Byron's Pool to Brasley Bridge, in Grantchester Mill Pond, along the whole western side of the river at Grantchester Meadows, at Sheep's Green and Coe Fen, particularly in the Newnham Mill Pool and the main Mill Pool by Silver Street bridge, and then from Jesus Green, mostly on the south side right through to Fen Ditton, and on the north side from the Pike and Eel along the towpath to Fen Ditton and Clayhithe. The central sections are particularly suitable for young people, being within easy reach of most of the housing areas of the City by bus or bicycle.



In general terms the fishing is quite good and although the River Authority do some restocking, they consider the area to be self-supporting. The more common fish to be found here are roach, dace, chub, perch, some trout and pike.

In this section of the Cam there is no pollution problem, but fishermen with a long knowledge of the area are sure that the quality of the water has deteriorated and that years ago it was much clearer and cleaner so that fish thrived more, and they instance the fact that crayfish could be taken easily from the Grantchester Meadows stretch.

In some years it seems that there is not the quantity of water reaching the river to maintain a good flow throughout its length, and there are also problems with the quantity of surface water run-off from roads which carries with it residual traces of petro-chemicals.

The fishermen require few facilities except for some car parking at points convenient to the river, and occasional trees and bushes to give some shelter and act as windbreaks.

The major problem that they face as a group is competition with boating interests. In some cases there is liaison between the groups when specific matches or regattas are planned, but the day-to-day problem is significant. Of particular concern are the powered boats on the stretches below Jesus Lock, some of which do not keep to the river speed limit and thus cause disturbance of the river bottom and damage to the banks. There is little possibility of a solution to the competition except by better liaison between organisations and mutual tolerance.

Natural History

The River Cam is one of the smaller rivers draining the region surrounding the Fens. The main river flows generally north eastwards along what is known as the Ashwell Valley. It is bordered on the south east by low chalk hills and on the north west by boulder clays left by the Ice Age. Through most of its length the Cam is bordered by alluvial soils which it has laid down. The valley was once marshland, but is now well drained and forms a belt of open land comprising the open spaces described in this report. Cambridge itself is situated where chalk hills and gravels approach the river, thus making a firm crossing point in early times.

The variety of the geology and thus of the soils and vegetation creates a variety of different habitats for flora and fauna. The chalklands are mostly under cultivation with large fields and small hedgerows. The most common woodland is composed of beech which has little undergrowth. This creates conditions generally unfavourable to wildlife. The heavy clay soils provide a contrast with the chalk in that fields are smaller, hedgerows more numerous and trees of greater variety. Many species of birds are found together with a few mammals such as foxes and badgers.

The river valley itself is similar to the heavy clay lands, but has in addition areas of more marshy land. Thus the variety of wild life is greater. It is only in Cambridge itself, however, that there are any substantial areas of old deciduous trees and long established gardens, and this, surprisingly, makes it the best area in the county for studying woodland and garden birds.

Each of the areas along the river from Byron's Pool to Fen Ditton create different environments and the following pages describe the main flora and fauna found in each area.

Byron's Pool

This is a valuable site from the natural history viewpoint, consisting of a narrow belt of woodland bordering the river, south of Grantchester. The pool was formed by sluices and the area is owned by the Council as a nature reserve.

The wood has a mixture of mature trees of oak, ash, elm, beech, alder and sycamore with a lower layer of hawthorn, elder and field maple. There are numerous good paths, though it becomes wetter near the river with many swampy pools. A good selection of common woodland plants grow here with a variety of mosses. There are typical water plants along the river bank and various marsh plants grow in the swampy meadow.

The trees and scrub along the river provide useful nesting sites for a variety of birds. The Bourn Brook and backwaters provide a refuge for ducks, moorhens and coots.

Grantchester Meadows

The path to Cambridge through the meadows is well known with fine views of the river and surrounding countryside. The short grass is an excellent feeding ground in winter for fieldfares, redwings and lapwings. The pollarded willows provide niches for tree creepers, spotted flycatchers, owls and kestrels, while the tall hedgerows and bramble make roosting and nesting sites for numerous passerines. Other birds seen here are the great spotted woodpecker, sedge and reed warblers in the summer, and long-tailed tits.

Paradise Nature Reserve

Paradise is a patch of wet meadow and marshland with belts of willow and alder scrub on the west bank of the river above Coe Fen.

It is owned by the City Council as a Public Open Space and nature reserve, and a nature trail takes visitors on a made-up perimeter path. It is most unusual for a town to possess such a valuable area of undisturbed vegetation so close to its centre.

Most of the area consists of marshy ground with a thick cover of grasses, sedges and plants which thrive in damp places. There are some large trees, mostly alders and a number of different willows. The considerable scrub cover makes the site an excellent one for the smaller garden and hedgerow birds and others such as reed buntings and sedge warblers. Water birds such as moorhens, little grebes, water rails, and occasionally kingfishers can be seen, and the proximity of the wooded Paradise Island means that spotted woodpeckers, treecreepers, spotted flycatchers and nightingales can be observed. Repoll, siskin, goldfinch and several tits are found in the larger trees.

Coe Fen, Sheep's Green and Lammas Land

Coe Fen and Sheep's Green have been common grazing land for the people of Cambridge for many years. The regular grazing of cows and horses preserves the natural balance of the vegetation, and the only management needed is the cutting of tall weeds such as docks and nettles. A nature trail has been laid out by the City Council through the meadowland of Coe Fen beside the river to Robinson Crusoe's Island and back over Sheep's Green.

Numerous trees such as willows and poplars are dotted about the meadows. The grassland is lush and buttercups are plentiful in early spring. One unusual plant is the alien purple toothwort, a parasite growing on tree roots in the region of Robin Hood Island. It is not native in Britain but has spread along the river in Cambridge since its introduction from the Botanic Garden over 50 years ago. The meadows are well irrigated by many small streams and ditches lying between the two main channels of the river and these provide excellent habitats for water plants and pond life. The short grass is a useful feeding ground for rooks, starlings, song thrushes, blackbirds, moorhens and mallards. The planting of groups of alder trees would add variety to the scene and attract additional birds such as redpolls and siskins. Other birds seen here are the kestrel hunting over Laundress Green, moorhens in ditches, coots, little grebes, herons and kingfishers.

College Backs

This area consists of many College gardens and parkland and some meadows intersected and drained by ditches. There are many splendid trees, mostly elms.

The Backs are one of the greatest attractions of Cambridge, and as a result the area is much disturbed by visitors. Nevertheless, because of the trees and gardens it contains many birds. The heron can be seen in early morning; coal tits, blue tits and great tits are common. Moorhens inhabit the ditches and tawny owls are well established. Swifts, swallows and house martins can be seen on buildings close to the river, and the sand martin sometimes nests in drainage holes beside the Cam. Where there is adequate undergrowth bullfinches and goldfinches breed and various warblers and nightingales can be seen. A few pairs of goldcrest nest near the College Backs and nuthatches, redpolls and treecreepers are fairly common. Great and lesser spotted woodpeckers, jackdaws and stock doves are all to be found in the old trees.

Jesus Green, Midsummer Common and Stourbridge Common

These areas are less interesting from a natural history point of view but of great amenity value. Though the area is close to buildings, there are many riverside and water plants, and the aquatic life is similar to that in the upper reaches.

Elm Disease could result in the loss of some mature trees in this area and these should be replaced with beech and wych elm, which would provide nesting sites for various birds. Clumps of pines or larch at the edge of the Commons would add to the bird life and general interest of the area.

The banks of the river opposite the gasworks and Stourbridge Common provide a refuge and nesting site for sand martins, ducks, geese and swans, though the latter have declined due to the disturbance caused by the construction of the new bridge. A nature reserve in this area would be beneficial. The surface flooding of Stourbridge Common in winter could be assisted, as it provides a valuable feeding ground for ducks and waders, especially snipe. The teal is also a winter visitor as is the ruff, a bird which is declining in numbers. Black headed and common gulls come here after feeding at the rubbish tips. Other birds seen here include 4-5 pairs of mute swans, carolina ducks, which have escaped from the Botanic Gardens, coots wintering at the gasworks, redshanks and flocks of lapwing in hard weather. A small colony of sand martins nests in the river bank near the gasworks.

Fen Ditton

The pollarded willows and dense hedgerows along the tow path are nesting and roosting places for many passerine birds and should be preserved. The proposed northern by-pass, boating marina and recreational area may have a serious effect on wild life in the area, and efforts should be made to minimise their impact. A nature reserve could be established between the Cambridge sewage farm, the railway sidings and the river - incorporating the watermeadows, hawthorn thickets and old ballast pits.

Many birds can be seen in the area including pochard, tufted duck, goldeneye, blackbirds and song thrushes on Chesterton Fen, jays and magpies. Pheasants, partridges and red-legged partridges breed near Fen Ditton, and the redshank nests there. The yellow wagtail is a summer visitor and snipe feed on the wet areas. The corn bunting has bred there, sometimes venturing into the City in winter, and lapwings nest in the water meadows.

Watercourses of the Cam

The Watercourses of the Cam are used for land drainage, navigation, fishing, defining property boundaries, separating areas of different land use, recreational, amenity and educational purposes.

An impassable dyke is an attractive and effective boundary, bearing a pleasing flora of floating plants and reedswamp fringes. Watercourses are used between Colleges and can be extended by making new dykes or by deepening and widening existing ones. As dykes increase drainage, water must be held at their lower ends to prevent a lowering of the water table. The stagnant backwaters along the Backs and Jesus Ditch are renowned habitats for many algae and protozoa.

Vegetation in and beside watercourses provides plant cover for fish and the invertebrates on which they feed, protects the bank, improves amenity and provides natural vegetation of interest to the naturalist.

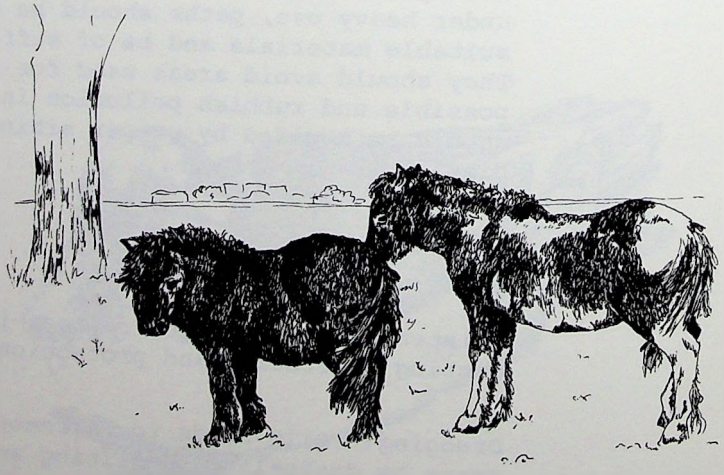
Visitors enjoy walking beside rivers, brooks and dykes, but if the ground deteriorates under heavy use, paths should be surfaced in suitable materials and be of sufficient width. They should avoid areas used for fishing where possible and rubbish pollution in watercourses should be avoided by proper siting of litter bins.

Maintenance of the watercourses is by dredging, cutting vegetation and protection of the banks:

Dredging: Silt needs to be removed every 5-12 years by deshoaling, desilting and deepening. Short stretches should be treated at a time to allow recolonisation of dredged areas from un-dredged areas.

Cutting Vegetation: Vegetation should be cut only where plants prevent the free flow of water in the channel. It is not necessary if vegetation is non-invasive and kept down by boats or confined to the edge of the dyke. Banks bear herbs and shrubs and should be cut only if access is needed as they form a pleasant wilderness to the less populous areas. Watercourses are often divided from each other by sloping grassland which is maintained by grazing or occasional mowing.

Protection of the Banks: Banks may need reinforcing on eroded sections with wood, metal or concrete. Trees on the bank should be encouraged as their roots afford excellent protection to the sides. However, any increases in artificial construction should be carefully considered and excessive tidying-up should be limited to essential places, as these activities tend to destroy the existing habitat.

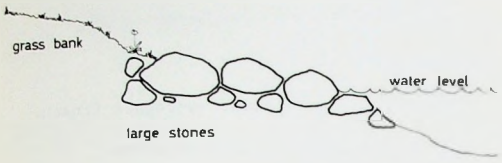


Environmental Details

The quality of small scale detailing of banks, paths, railings, furniture, signs and small bridges has an enormous effect on the overall quality of the environment. The following pages show a range of details which are considered appropriate for the River Cam in both its rural and urban sections and which could be used in place of present unsatisfactory features, or to solve present problems. The details shown are by no means a total review of all possible answers, but establish a basic framework against which to judge other proposals. It should be remembered that the simplest answer is often the best.

Water's Edge

The demarcation between the water and the land is perhaps the most critical detail affecting the quality of the river at any point. It is visible both from the water and from the bank and is best when it seems to reflect the general nature of the environment. Thus in the rural areas the range of answers lies in the use of natural materials and forms which can blend into the surroundings and be hardly noticed, but will protect the water's edge from erosion or be just sufficient to allow the natural environment to recover after public usage. In the urban areas more substantial treatment is often required, and provided that the materials and forms used are indigenous to the area in question or reflect traditional answers to the same problem the outcome is likely to be satisfactory. In the urban area the least successful solution is often the use of large areas of smooth concrete wall which is unattractive and makes least use of the river's unique quality of reflection.



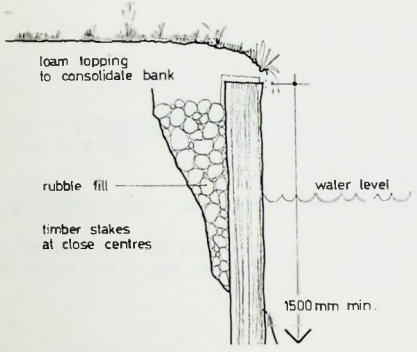
Rural.

Stabilisation of bank against erosion.

Stone.

Unlimited life. Some stones may be lost in flood or through vandalism.

Good natural bank. Should only be used where stone is indigenous.



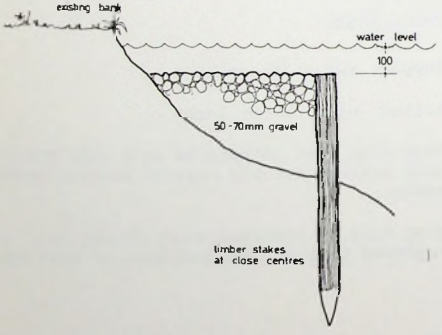
Rural.

Stabilisation of bank against erosion.

Willow, elm or larch stakes at close centres.

Periodic replacement.

Ideal rural embanking. Invisible from above and often becomes well camouflaged to views across the river.

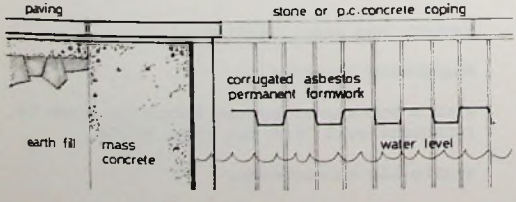


Rural.

Stabilisation of bank.

Willow, larch or elm posts and gravel.

Unlimited life.



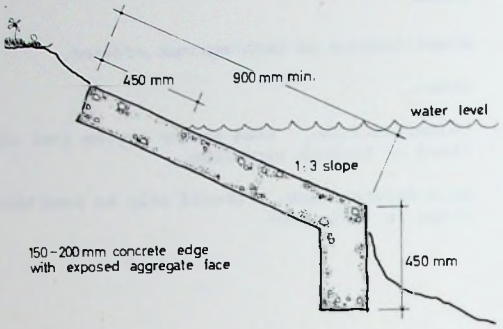
Urban.

Reinforced Concrete.

Long Life.

No maintenance normally required.

Lack of surface modulation or texture detracts from the river scene and encourages algae growth. Does not possess the visual qualities of texture and tone of brick or stone quays whose precedent this follows.



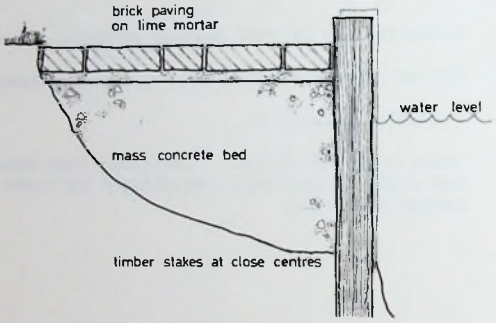
Rural/Urban.

Stabilisation.

Mass concrete, exposed aggregate finish.

No maintenance normally required.

Set at the correct level a good bank can be formed to resist water erosion and withstand public use.



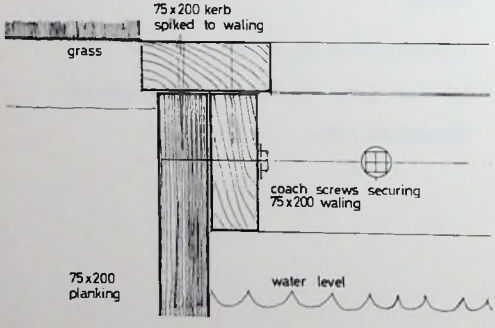
Urban/Rural.

Over use of bank by the public.

Willow, elm or larch stakes and paving (brick stone, timber block, p.c. concrete) on concrete bed.

Periodic replacement of stakes required.

With small scale paving behind, stakes capabl of integrating equally well into rural or semi-urban settings.



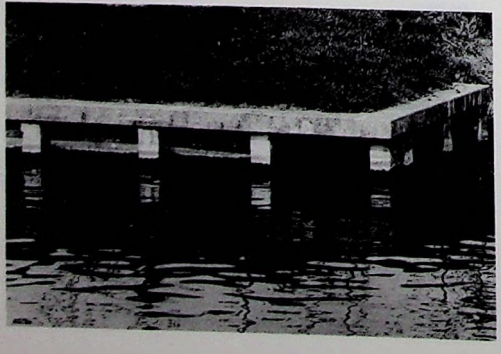
Urban/Rural.

Support and stabilisation.

Willow, elm, oak or larch.

Good edge that integrates well into the town park environment and resists overuse by the public.

Long life. Isolated decay should be replaced to avoid the collapse of bank behind.



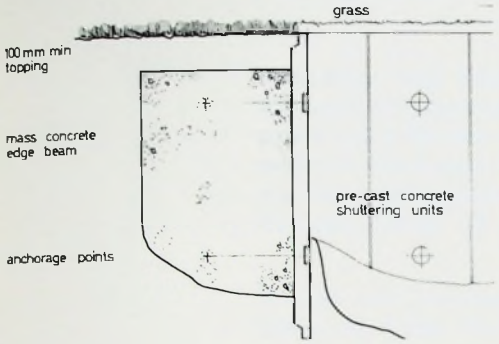
Urban.

Support and stabilisation.

Reinforced concrete.

With a low elevation has sufficient form to integrate well into the river scene.

Negligible maintenance.



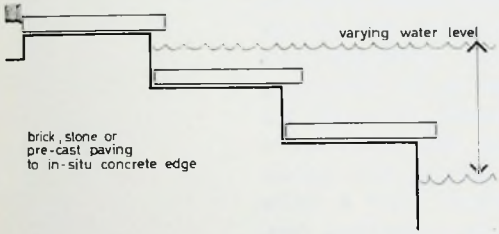
Urban/Rural.

Support and stabilisation.

Pre-cast concrete units and mass concrete.

Clean method of edge treatment allowing grass to overhang the edge and conceal it from above.

Negligible maintenance.



Urban.

Support and stabilisation.

Mass concrete with applied paving in brick, stone or p.c. concrete.

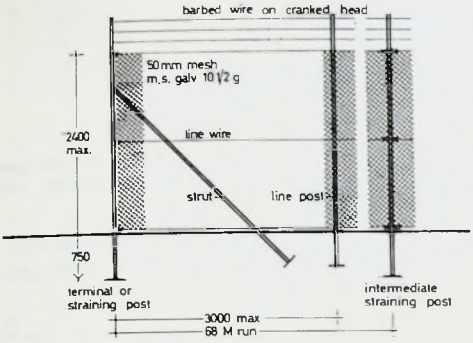
Change in water level allows water line to advance and recede while the varying depth of bottom adds a new dimension to the water's edge.

Negligible maintenance.

Railings and Fences

Railings and fences serve primarily as a visual or physical barrier and as the principal means of defining potential danger points in areas of public access. Their secondary purpose is to define space and divide areas of different function.

There are innumerable types to choose from ranging from the traditional fences and railings in cast iron, of which Cambridge has so many excellent examples, those in timber which are usually associated with the rural environment, through to modern industrial products of a bewildering variety of designs. In general terms the more simple the structure the more likely it is to be acceptable, and again the choice should be made with a view both to functional requirements and suitability of material and design.



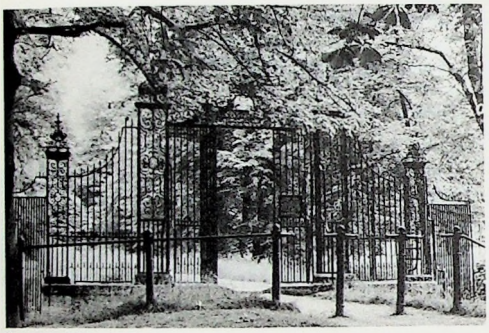
Urban.

Security.

Galvanised mild steel posts (with cranked heads), wire mesh on straining wire.

Very secure if erected correctly and relatively inexpensive: not too offensive in appearance.

Long life, p.v.c. coated mesh available to improve durability. May easily be deformed.



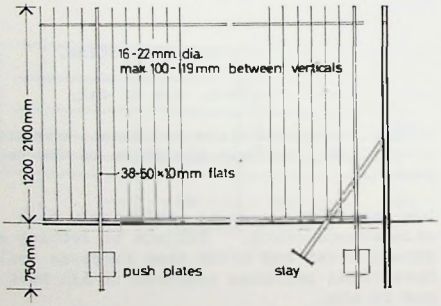
Urban.

Security/Ornamental.

Cast/Wrought iron often on dwarf brick wall (with coping).

Very Secure.

Long life, occasional painting required, weathers well. Replacement expensive in case of damage.



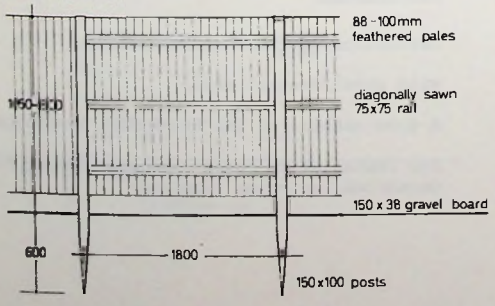
Urban.

Security/Ornamental.

Mild Steel/Wrought iron.

Fairly secure (self adjusting types available).

Long life, occasional painting required, bars can be prised apart to gain access. Top may be hooped or interlaced to give decorative capping.



Urban/Rural.

Security/Privacy.

Oak post and board.

Robust, clean and pleasing in appearance.

Available with or without capping pieces.

Little maintenance. Occasional inspection and clearance of earth from gravel board.

Urban/Rural.

Separation of function.

Cast iron.

Individual character stamped on to the same basic style of railing, simple design, clear expression.

Low maintenance costs, painting required occasionally, heavy replacement costs in case of serious damage.

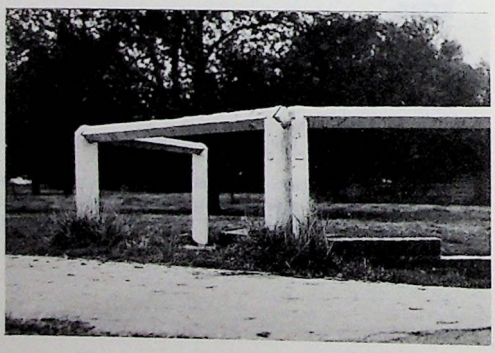
Urban/Rural.

Separation of function.

Cast iron.

Individual character stamped on to conventional railing form; simple, clear expression.

Low maintenance costs, painting required occasionally, heavy replacement costs in case of serious damage.



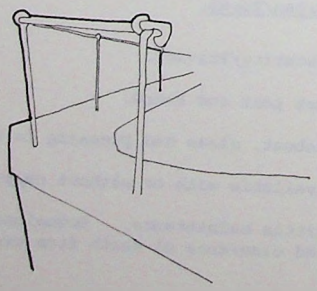
Rural.

Definition of functions/Protection.

Larch, sweet chestnut, elm or oak.

Simple undemonstrative statement, character stems from intrinsic qualities of the natural material.

Low installation costs, relatively high maintenance costs. Subject to rotting at ground level and cruck that receives rail. Occasional painting required of all butt ends and to elm.



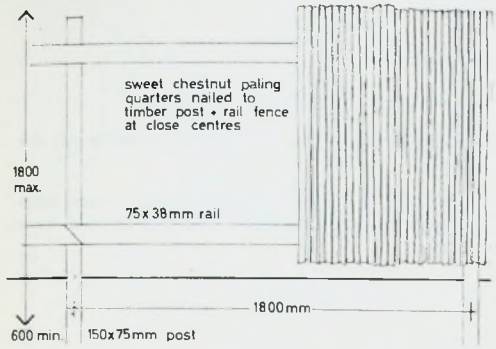
Urban/Rural

Definition of function/Protection.

Mild steel/Wrought iron.

A good example of the functional tradition.

Low installation costs, low maintenance costs. Occasional painting required.



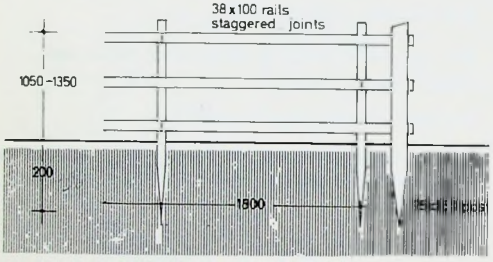
Urban.

Separation of function/Privacy.

Oak, sweet chestnut, larch and elm with sweet chestnut paling.

A natural fence, with high textural and visual qualities that blends well into the locale.

Low maintenance, occasional painting of butt ends required.



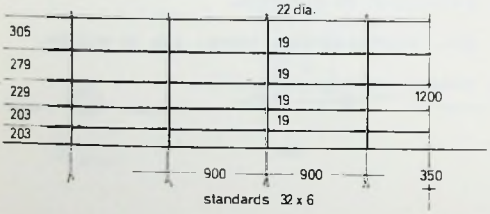
Rural.

Separation of function/Livestock security.

Oak, larch and Spanish chestnut.

Traditional answer to lowland enclosure.

Low maintenance, long life. Other timbers must be treated with preservative.



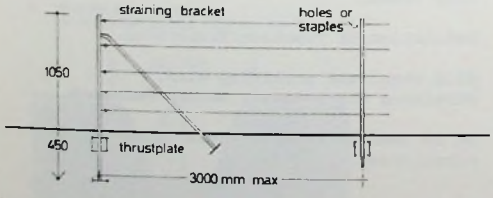
Rural/Urban.

Separation of function/Animal security.

Flat, tee or 'H' section mild steel supports and flat rails.

A sturdy enclosure of predominantly horizontal form.

Low maintenance, occasional painting required. Bars may be bent with heavy use.



Rural.

Separation of function/Animal security.

Mild steel angles and galvanised steel straining wire.

Low maintenance, wire needs replacement about every 5 years.

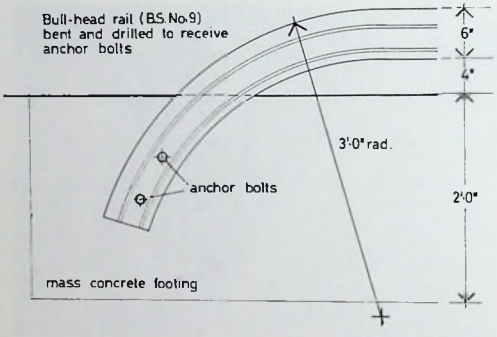
Urban.

Protection

Mild steel, aluminium, bronze.

Simplest and most successful example of its type.

Installation costs fairly high. Long term maintenance can be a problem at ground level



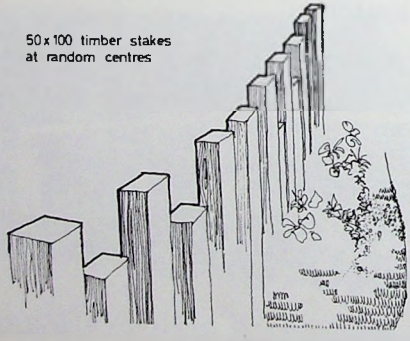
Urban.

Definition of function.

Mild steel (standard Bull Head rail) and concrete.

Economical and simple detail.

No maintenance normally required. Should b white painted where used to define vehicular movement.

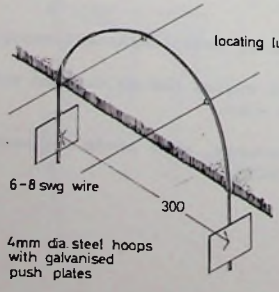


Urban/Rural.

Definition of function.

Oak, sweetchestnut, larch, elm or willow.

Simple, natural definition.



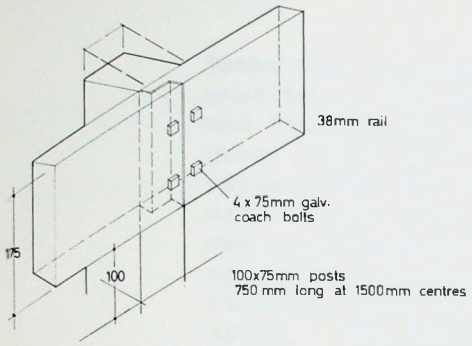
Urban.

Trip fence.

Definition of function/Protection.

Mild steel and straining wire.
Straining wires easily become deformed.

To be used outside the main lines of circulation.



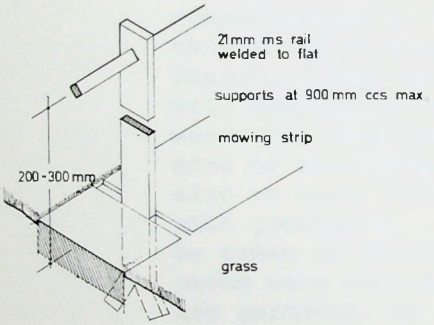
Urban.

Trip fence.

Definition of function/Protection.

Oak, larch, sweet chestnut.

Should not be sited in vehicular areas where rail becomes very susceptible to damage. Treatment of butt ends required against decay.



Urban/Rural.

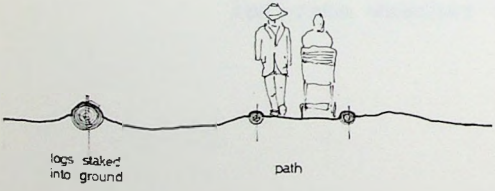
Trip fence.

Definition of function/Protection.

Mild Steel.

Strong solution, visually unobtrusive.

Inexpensive. Excessive distance between supports may permit deformation.



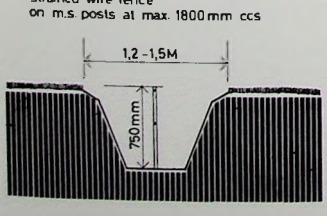
Rural.

Trip rail/demarcation of function.

Timber with metal or wooden stakes.

Economical barrier capable of integrating well into the landscape.

Long life.



Urban/Rural.

Definition of function/Ownership.

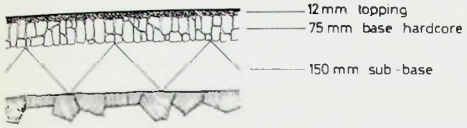
Trench with strained wire fence (see above).

The HA-HA. An invisible barrier.
Permits separate spaces to unify visually.

Periodic ditching required and painting of the mild steel posts.

Paths

Paths are an expression of human desire lines weaving in and out of the river environment and linking one area with another. Their great value is in their capacity for unending variety and the contribution which they can make to the total quality of the scene. They can be completely formal or totally informal, and their treatment will depend both on location and the amount and nature of their usage. The materials used must stand up to the expected wear, and should be directly complimentary to the nature of the area through which they pass. It is particularly important that the details of their edges are well handled in order to deter people from wandering from them and creating an untidy area of wear adjacent to them. This applies also to areas around gateways, stiles and path junctions. Particular care should also be taken in deciding whether or not to make paths worn through areas of limited public use permanent by surfacing. Inspection of the area both in summer and winter will often indicate whether this is necessary.



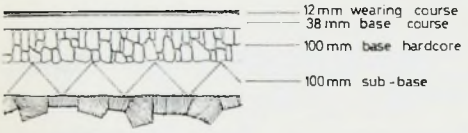
Rural/Urban.

Gravel.

An economical surfacing integrating well into the locale with good drainage characteristics when laid on hardcore bed.

Easily invaded by weeds, maintenance expensive. Good edging essential.

Self-binding gravel available.

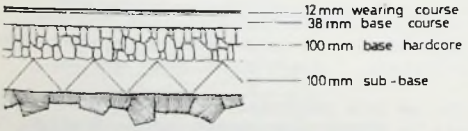


Urban/Rural.

Tarmacadam.

Relatively low in cost and easy to lay. Affords good grip and open textured variety will drain well.

Low maintenance, susceptible to invasion by weeds and root damage. Some edging required.



Urban/Rural.

Mastic Asphalt.

Smooth slippery surface unless aggregate is added. Close textured and impervious to moisture.

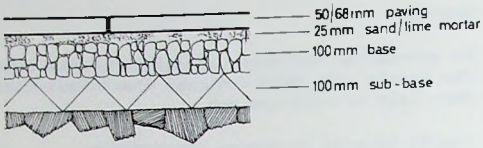
Expensive surfacing. Does not craze or crack. Good for level areas with little fall for surface water drainage. Keeps clean naturally where under constant use.

Urban.

Stone flag-paving.

May be of slate, granite, millstone grit (York stone) or sandstone. Provides a good surface with character.

Materials difficult to obtain at economic prices and expensive to lay. Low maintenance.



Urban.

Flag-paving.

Pre-cast concrete.

Lacks the intrinsic qualities of natural flags. Best when set off by natural materials. Different colours available.

Moderately expensive to lay, low maintenance costs.

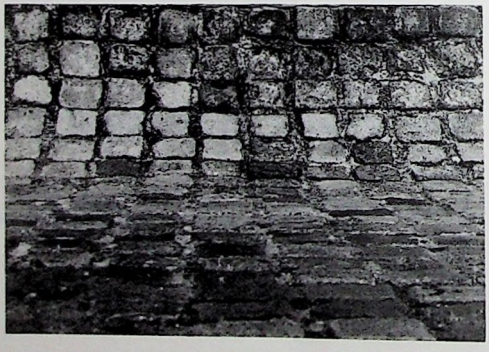
Urban.

Brick pavers.

Either normal bricks, dense and frost resisting and over baked or 2" pavers specially made with plain surface, chequered or diapered pattern.

Expensive to lay. Easily maintained.

Inappropriate for heavy traffic.



Urban.

Setts.

Fine grained granite in tapered cube form. Obtainable also from limestone, whinstone and gritstone. Human scale, hard wearing.

Can be laid in traditional patterns. Joints may be filled with cement mortar or grout, or occasionally may be bitumen pointed.

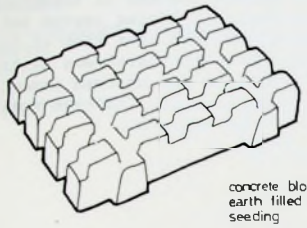
Urban.

Cobbles.

Beach silica pebbles with oxides which provide colour variation. Flint types available.

A good textural paving laid either in random or in rows. Sizes graded but smaller ones are difficult to lay.

Expensive with high maintenance costs. Correctly laid cobbles are tight butted and almost monolithic.



concrete block
earth filled for
seeding

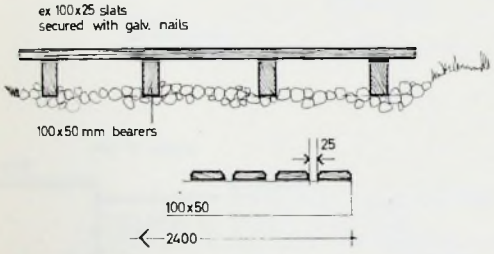
Urban.

Proprietary paving units.

Concrete.

A good hard surface providing some of the visual advantages of grass and the wearing qualities of concrete.

Relatively inexpensive. Inappropriate where vehicles might stand for long periods.

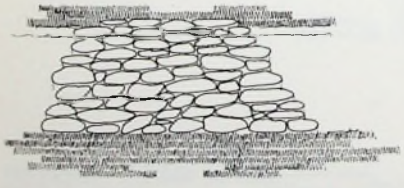


Rural.

Duck boarding (Douglas Fir, Western Hemlock).

A paving that integrates well on badly drained or flood land without the necessity of raising the level above the surrounding land.

Economical. Surfaces may need coating with grit to ensure firm foothold.



timber pile causeway

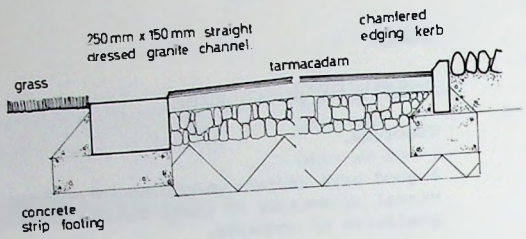
Rural/Urban.

Piled Causeway.

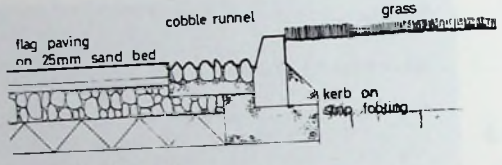
Timber, oak.

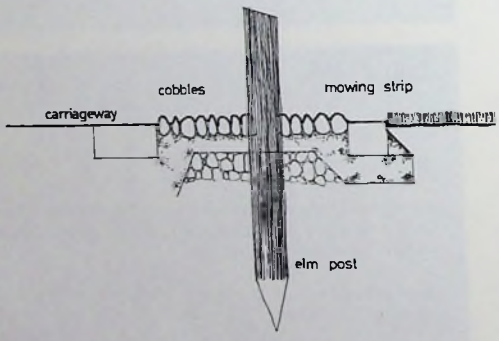
An excellent and durable surface ideal for water logged locations allowing percolation of water between the units.

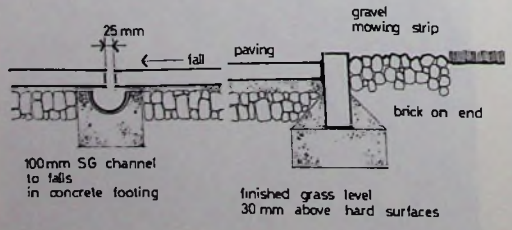
Inexpensive surface that integrates well into the environment.

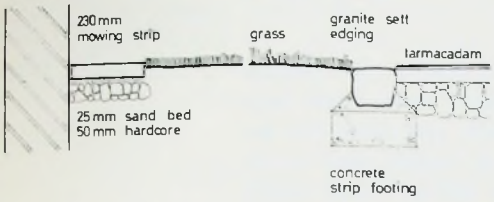


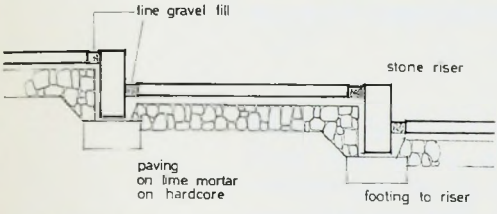
Of equal importance to the surface chosen for the path is the manner in which the edge is detailed and the way it integrates into the environment. Edging serves not only to contain the path, but keep it in good order and diminish the harshness of transition between paved and unpaved areas. The following examples indicate some ways that this can be achieved.

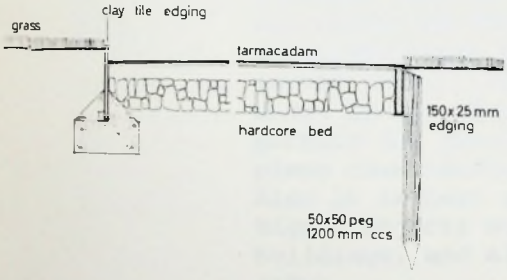


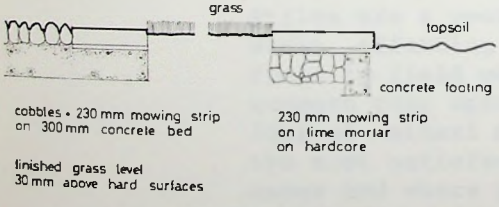


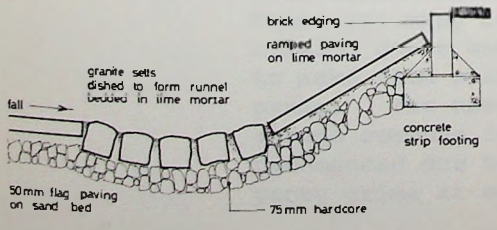












Where footpaths are surfaced with an homogenous material i.e., asphalt, day to day repairs to services below may have to be carried out and making good becomes difficult. The use of small scale materials such as brick or setts overcomes this problem and avoids the unfortunate patchwork effect so often apparent in these surfaces.

Furniture

Along the routes between one area and another and in areas where the public congregate there is an obvious need to provide seats, litter bins and other pieces of furniture. In the past the design and siting of these things has left much to be desired and there is a tendency for a standardised solution to be adopted regardless of location.

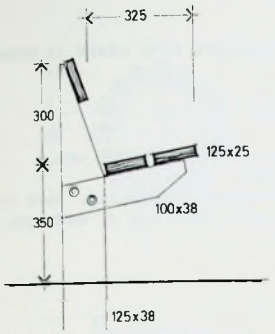
This is particularly noticeable with seats. They are often placed in random positions beside paths in an exposed location where one secured against a nearby wall would give better protection. Similarly, a more flexible form of seating than the "park bench" can offer the user variety. Closely associated with benches is the provision of litter bins. It is logical to put these where groups of people gather, especially for picnics and lunchtime sandwiches, but not to place them needlessly between those points. Also it is best practice to relate them to bigger objects such as benches, walls or buildings, and always to provide them with lids.

Stiles are a useful feature on footpath networks, affording walkers easy access from field to field while saving farmers a lot of concern over open gates. Simple constructions of natural materials are again usually the most satisfactory. On paths with heavy usage and where people are liable to have pushchairs and prams, stiles are not practicable and simple gates should be used. There are many countryside examples of self closing gates and these can be simply adapted to make them suitable for pushchairs and prams. The need for lighting on footpaths across commons in the City is becoming more pronounced due to an increasing incidence of petty crime at night. Where lighting is

required, however, great care will be needed, especially in predominantly rural areas, to avoid the introduction of typical urban lamp standards. The use of low lighting bollards which only light the path should be investigated.

Finally there is often a necessity for signs to be put near the river giving instructions or advertising facilities. Fortunately the number of signs present along the river frontage in Cambridge is very few, and what do exist are generally unobtrusive. In most cases straightforward lettering and simple colour will be most suitable, and the use of symbols could be considered. There are cases where people gather to hire punts or to drink for a more gay and flamboyant style of advertisement. It should also be remembered that lettering can be quite small but still remain legible to pedestrians and water users. As a guide, letters of 25mm are visible over 7·6 metres, and 100mm letters are visible over 30 metres.

Seats

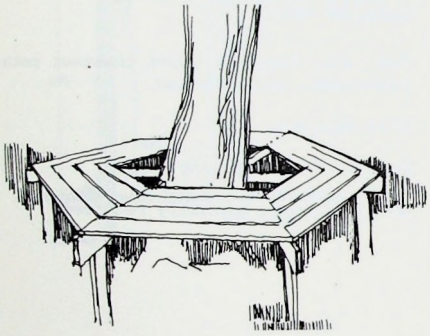


Urban.

Oak, elm, birch or sweet chestnut.

A robust and formal solution to seating provision.

Maintenance normally required with occasional painting of butt ends and of supports at ground level.



Urban.

Oak, elm, birch or sweet chestnut.

A formal solution that is successfully related to the existing features.

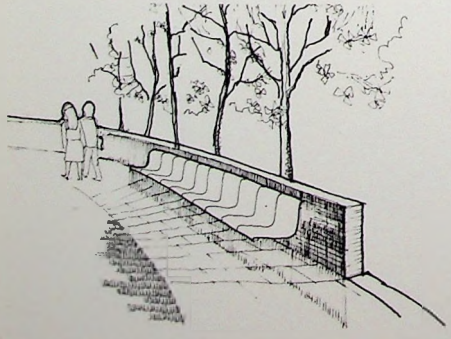
Maintenance normally required, with occasional painting of butt ends and of supports at ground level.

Rural/Urban.

Oak or elm logs driven into the ground in informal groupings.

Undemonstrative seat that integrates into the surroundings.

No maintenance normally required.

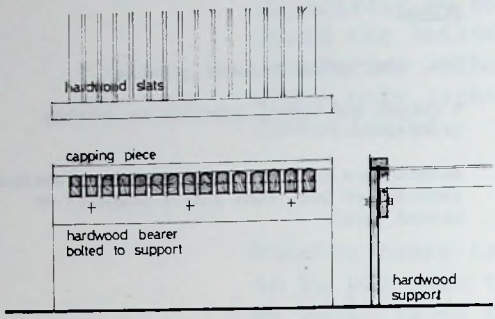


Urban.

P.V.C. or fibreglass units secured to wall or building either singly or in groups.

Fairly robust. Suitable for formal locations.

Some maintenance may reasonably be expected.



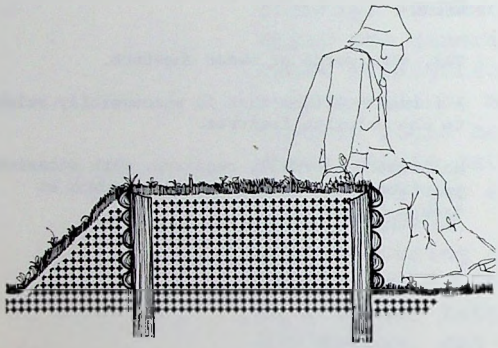
Urban/Rural.

Oak or elm supports with slats in matching material.

Fairly robust.

Formal solution for informal use.

Maintenance normally required, with occasional painting of butt ends and of supports at ground level.



Rural.

Oak, elm, birch or sweet chestnut retaining structure, earth filled.

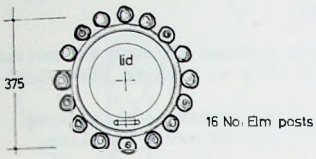
Turf topping.

Fully integrated seat.

No maintenance normally required.

Litter bins

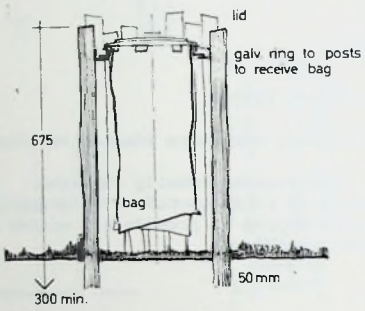
Rural.



Proprietary litter bag and supporting ring mounted in a group of timber stakes.

Integrates well into the landscape. The stakes serve to protect the bag from damage by animals.

No maintenance normally required.

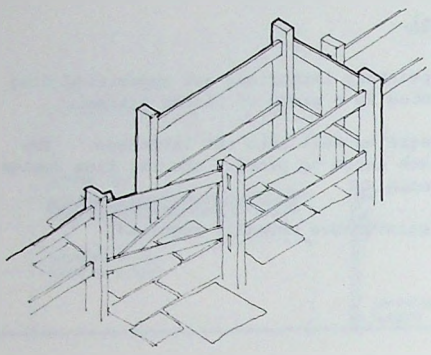


Urban.

Metal.

Council of Industrial Design Award winning design.

Gates and Stiles

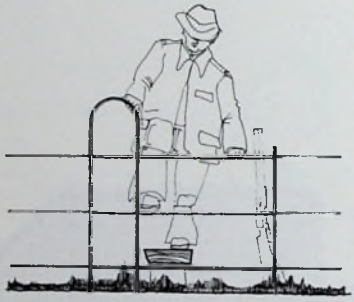


Rural.

Kissing gate, (here shown in post and rail fence).

Affords passage through an enclosure to all people with no risk to farm stock.

Occasional maintenance required. Paving must be provided to avoid puddling.

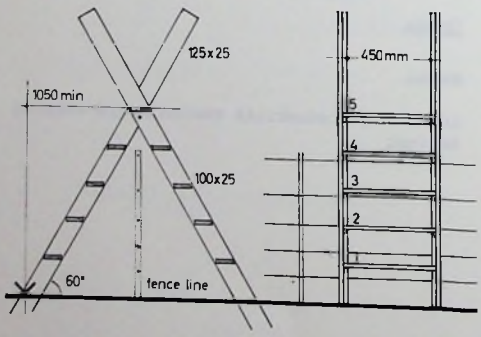


Rural.

Metal and timber.

Continuous bar fence adapted to allow passage.

No maintenance normally required. Timber should be rough coated to afford grip and paving should be provided at either end to avoid puddling.



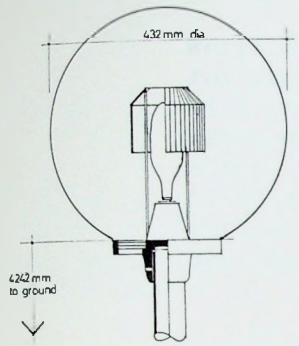
Rural.

Oak or elm over strained or barbed wire fence.

Only appropriate where the less agile may not reasonably be expected.

Occasional maintenance required at the same time as the fence. Butt ends of all timbers to be treated.

Lighting

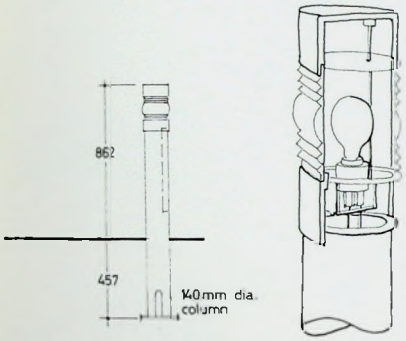


Urban.

General footpath illumination.

Well designed formal unit for wall mounting or free standing.

Vandal resistant. Maintenance as for more conventional street lighting units.

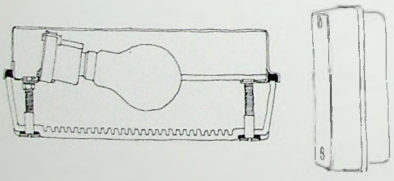


Urban.

Illuminated bollard.

Unobtrusive element in close or open environment.

Vandal resistant models available. Maintenance as for conventional street lighting.



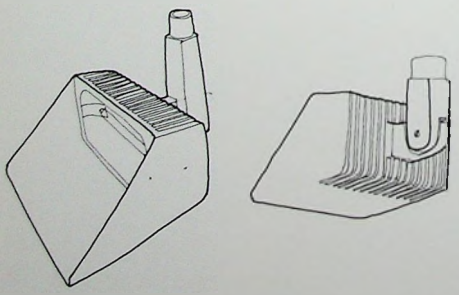
Urban.

Specifically for fixing to buildings or other significant structures.

Many well designed units available.

All should be related to the supporting structure and the electrical service concealed to avoid clutter.

Vandal resistant.



Urban.

Illumination of large elements in the landscape.

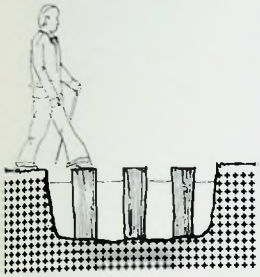
Compact unit of robust and elegant design.

Suitable for mounting on buildings, poles or within tree groups.

Not vandal resistant.

Bridges

While there may be requirements in the future for some major bridges over the river which will require extremely careful design, the major demand may well be for small bridges either over the river itself or over the tributaries and drains that flow to it. The following examples show some simple ways of dealing with the problem.



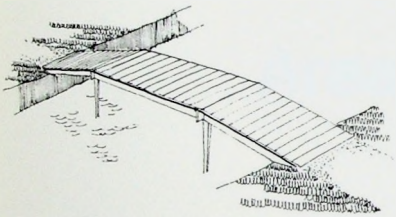
Rural.

Stepping stones.

Oak or elm piles or stone.

Unobtrusive link between spaces - not for heavily used areas.

Maintenance not normally required. Paving in equivalent materials should be provided on either bank to avoid the chance of puddling.

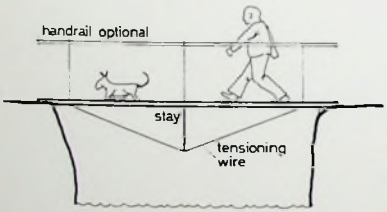


Urban/Rural.

Timber, oak, elm.

Formal link. The bridge's added width compensating for the exclusion of a handrail.

Maintenance will be required. Rough surface coating should be applied for grip, and surfacing provided at either end to avoid puddling.



Rural.

Post-tensioned timber span.

Longer span version of that above.

Maintenance occasionally required.

Urban/Rural.

Small scale suspension bridge.

Steel.

Elegant and simple link bridge adaptable to any scale and capable of full integration into the site.

Occasional painting required. Rust proof materials available at added cost.

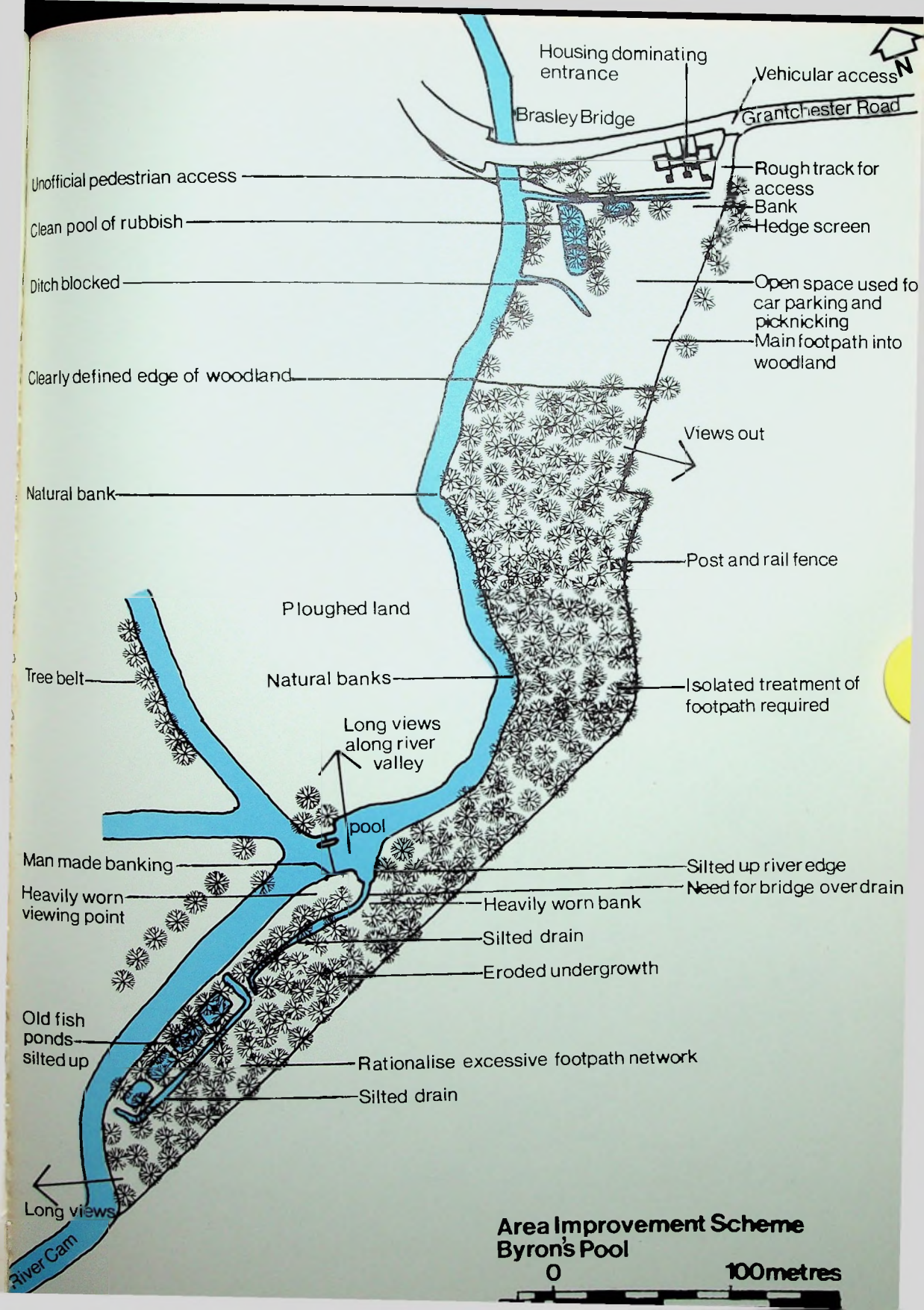
(Photograph by courtesy of Ove Arup & Partners).

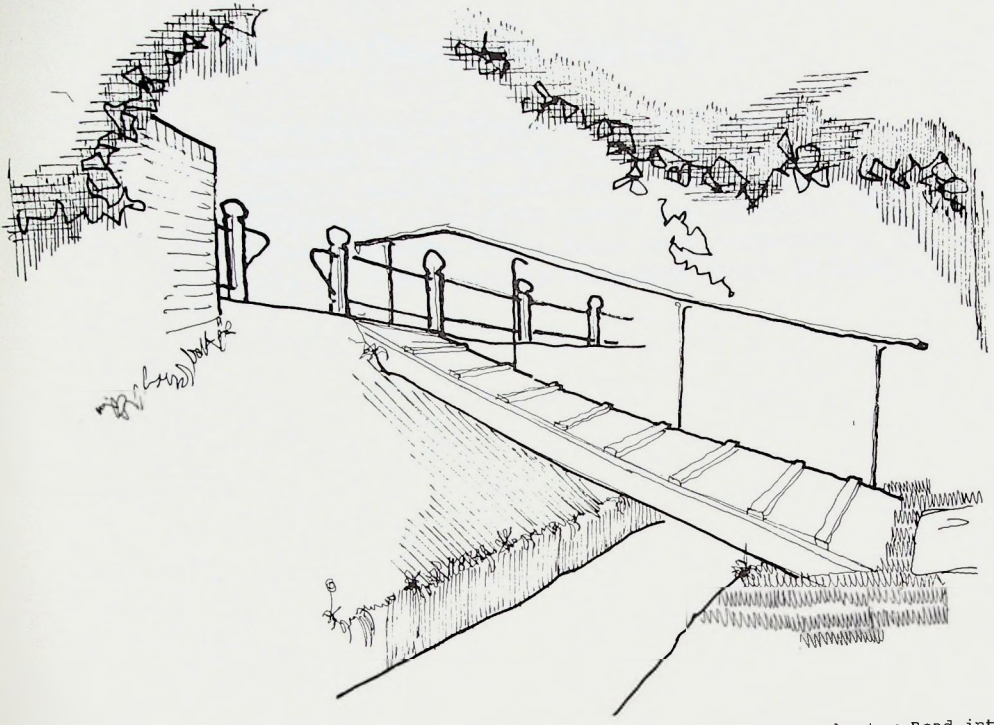
In several parts of the river area there is scope for improving the quality of the environment by improving the quality of the details used, and providing some further details to solve particular problems.

This report puts forward two such improvement schemes at Byron's Pool, and at Coe Fen and Sheep's Green.

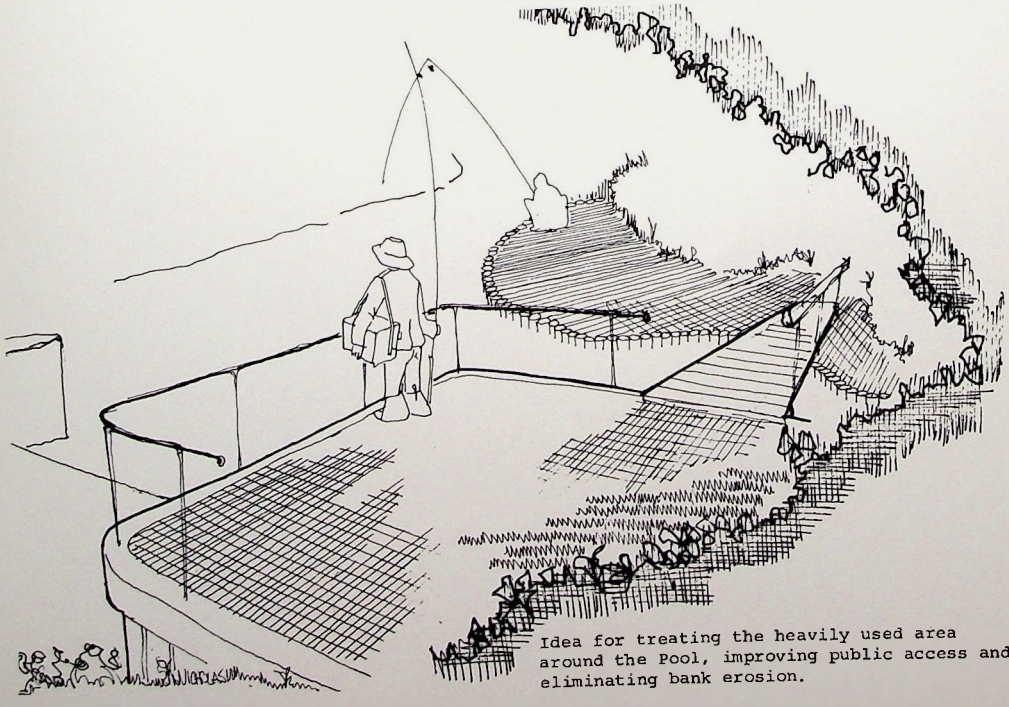
Byron's Pool

The improvements necessary to the treatment of Byron's Pool are only small in extent, but would have a marked effect on the amenity of the area. It is necessary to provide for more adequate vehicular access from Grantchester Road, to set aside a specific area for car parking and create a separate pedestrian access point into the area near Brasley Bridge. The rationalisation of the footpath system and the abandonment of half the informal paths which have destroyed much of the ground cover would have benefits. Finally, proper recognition of the focal point of the area, the pool itself, and the provision of more suitable ground and bank treatment is also desirable. This could generally improve the area without destroying its essentially rural and natural atmosphere.


N
Housing dominating entrance
Vehicular access
Brasley Bridge
Grantchester Road
Unofficial pedestrian access
Rough track for access
Bank
Clean pool of rubbish
Hedge screen
Ditch blocked
Open space used fo car parking and picknicking
Main footpath into woodland
Clearly defined edge of woodland
Views out
Natural bank
Post and rail fence
Ploughed land
Tree belt
Natural banks
Isolated treatment of footpath required
Long views along river valley
pool
Man made banking
Silted up river edge
Need for bridge over drain
Heavily worn viewing point
Heavily worn bank
Silted drain
Eroded undergrowth
Old fish ponds silted up
Rationalise excessive footpath network
Silted drain
Long views
River Cam
Area Improvement Scheme
Byron's Pool
0
100 metres



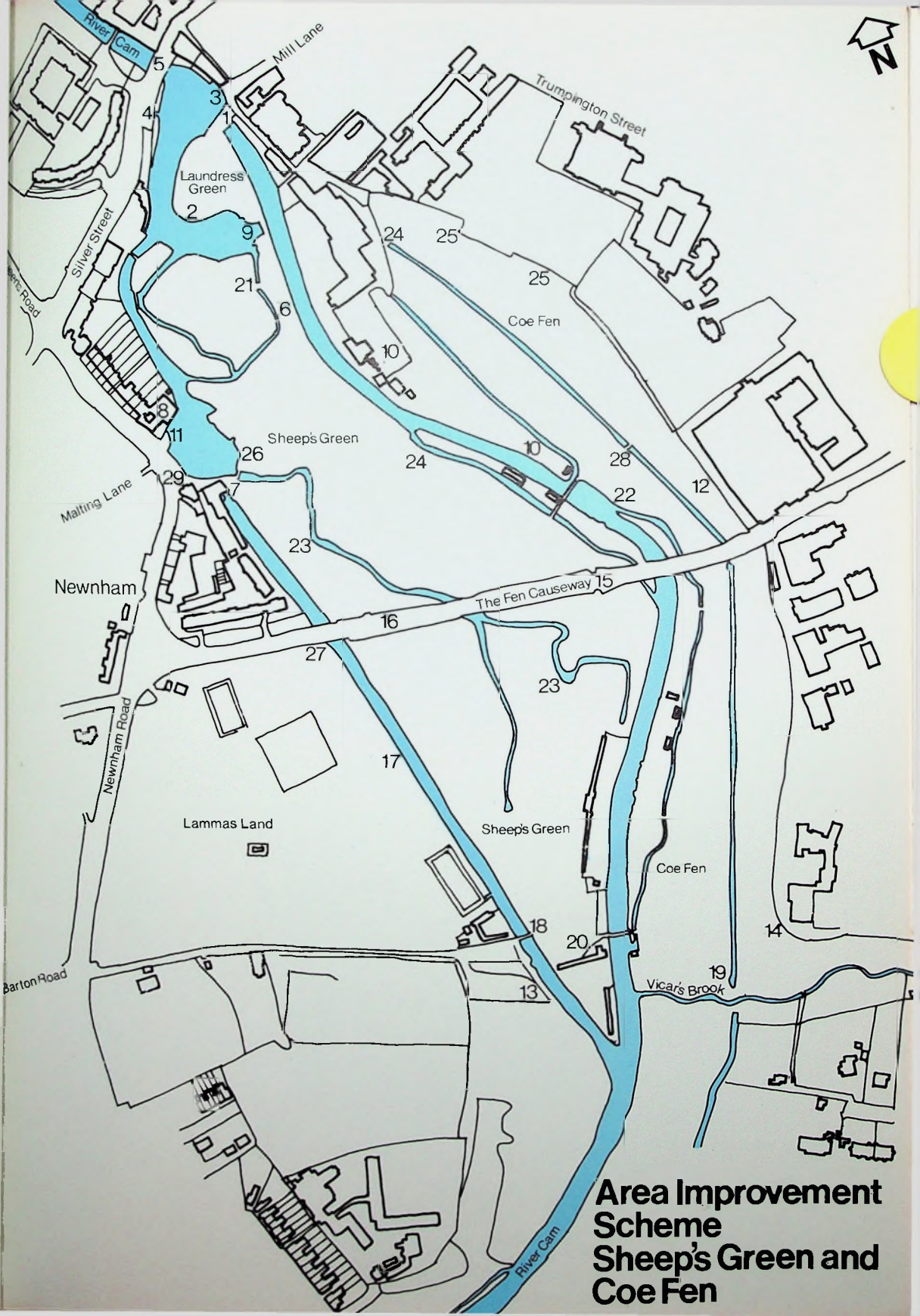
Pedestrian bridge from Grantchester Road into Byron's Pool.



Idea for treating the heavily used area around the Pool, improving public access and eliminating bank erosion.

Sheep's Green and Coe Fen

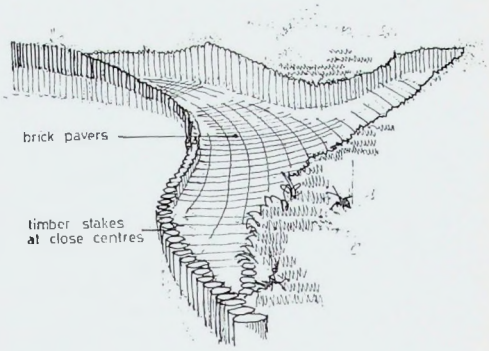
The quality of these two areas could be improved considerably by better treatment of details and the solution of other small scale problems. The plan shows the location of those features which have been considered and acts as a key to the drawings which follow.



Area Improvement Scheme Sheep's Green and Coe Fen

1 Open up Granta Place to the river by removing railings and restricting traffic movement, creating a unified floor treatment and allowing the surrounding buildings to clearly enclose the space.

2 Embank to eliminate erosion caused by heavy usage.



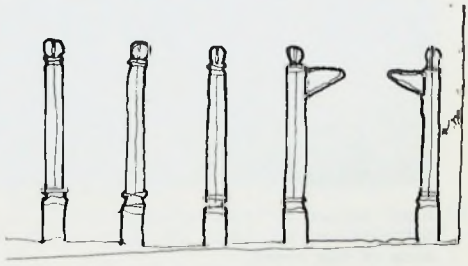
3 Provide footpath link by the river from the bottom of Mill Lane to the landing stage existing beneath the Anchor P.H., and improve the facilities for mooring punts.

4 Embank to eliminate further erosion caused by heavy usage. See detail 3 page 108

5 Replace existing furniture by less formal units more flexible in function and sited to exploit the location.

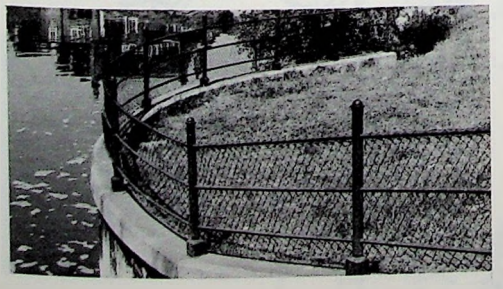
6 Replace existing bench by less formal unit. Relocate litter bin and repave adjacent area.

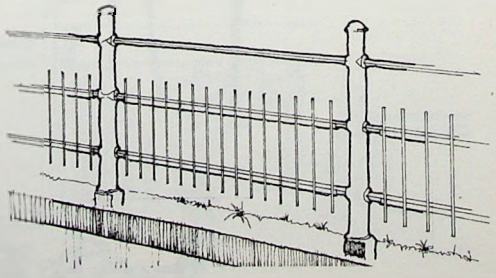
7 Replace fencing and re-site bollards - remove modern additions and re-pave.



8 Granta P.H., to be developed and riverside elevations improved.

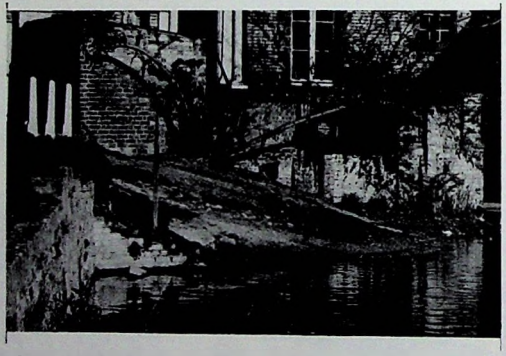
9 Remove unsightly wire netting from cast-iron railings and replace with units to provide equivalent security but having greater sympathy with the original.

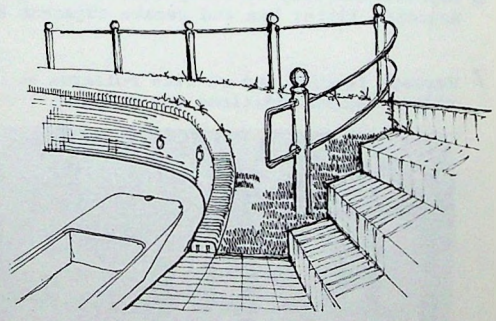




10 Encourage the removal of the agglomeration of sheds as being an undesirable intrusion into the river scene.

11 Provide proper landing-stage and mooring facilities with access from Newnham Road and related to the proposals for the Granta P.H.

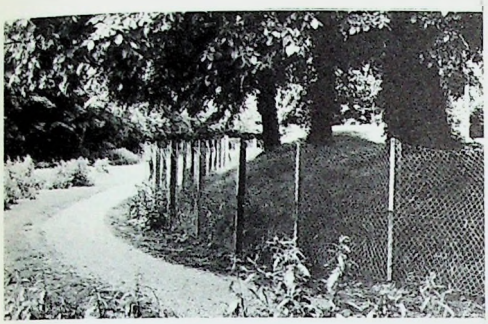


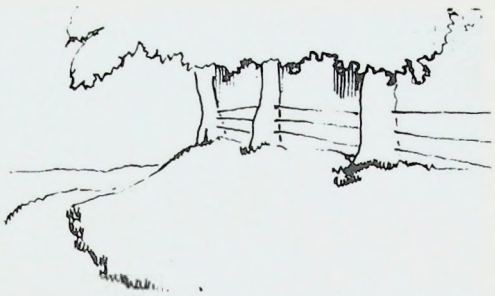


12 Plant screen of trees to Engineering Laboratories to reduce its dominance on this area of the river.

13 Provide landscaping to screen car-park.

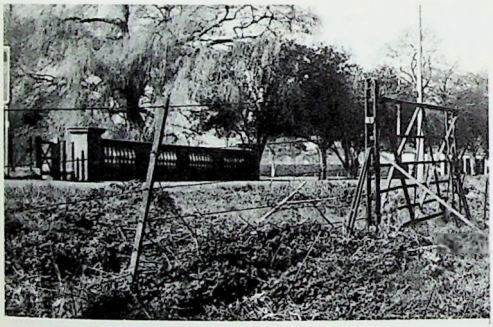
14 Replace boundary fence with more rural form and re-site on top of the embankment.

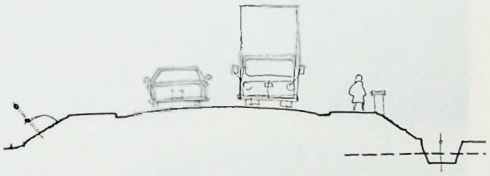




15 Pave underpass linking northern and southern sections of Sheep's Green and link in with adjacent footpath system.

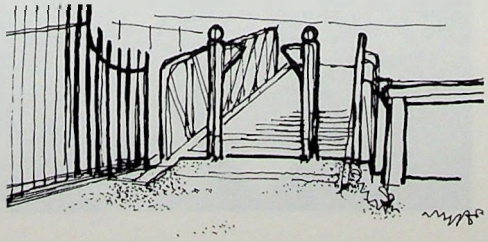
16 Remove existing fencing along the Fen Causeway. Form new barrier with the minimum of visual intrusion on the views across the road north and south.



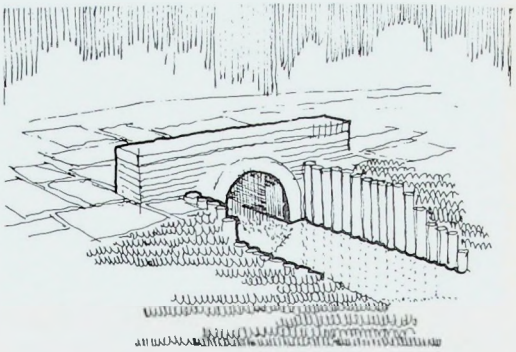


17 Replace temporary chestnut paling with more permanent type.

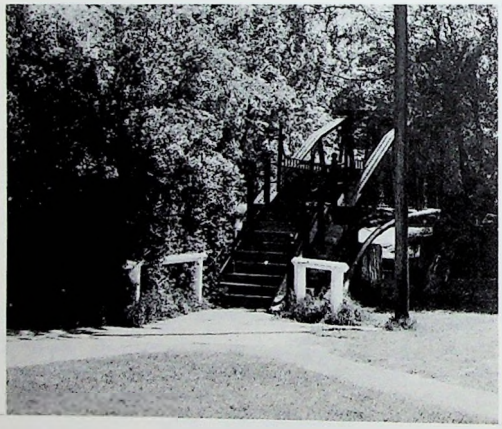
18 Rationalise the fencing that abuts the foot-bridge across the Mill Stream and reinstate paving.

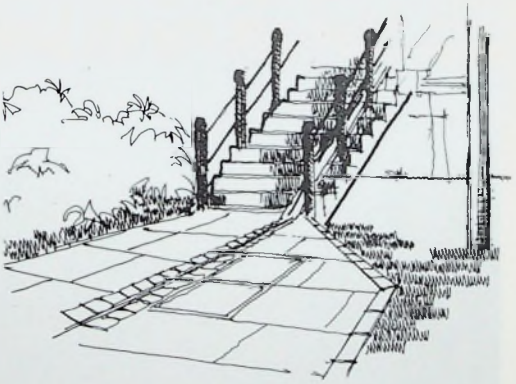


19 Pave, and embank as necessary, the area around the end of the drain to obviate further erosion.

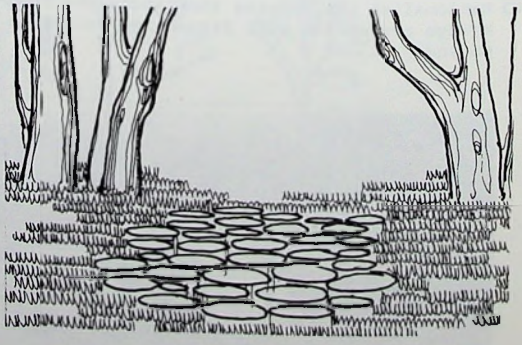


20 Rationalise the paving at the footbridge approach.





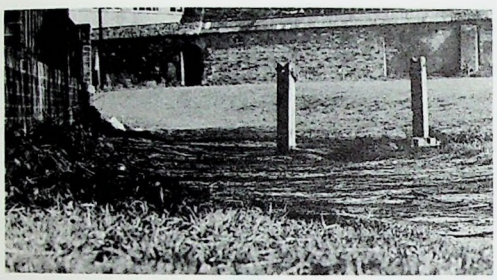
21 Form link across water course between main footpath network and Green.

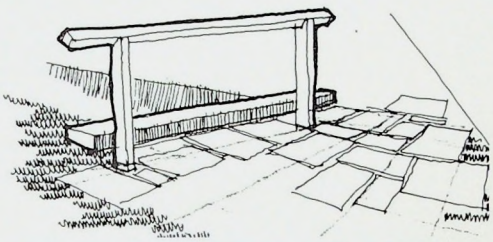


22 Embank to eliminate further erosion of the bank caused by heavy usage. See detail2 page108

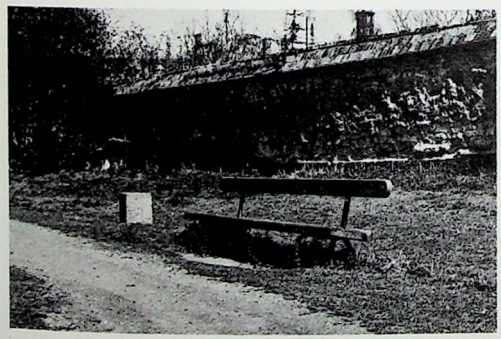
23 Embank to eliminate further erosion of the bank caused by heavy usage. See detail3 page 107

24 Provide footpath across soft ground adjacent to the drain and reinstate fence.





25 Replace furniture and relocate in the shelter of the ancient wall where people would prefer to sit.



26 Replace sign with a less wordy message more clearly stated and attached to a tree.

27 Repair bridge.

28 Extend paving to cater for actual pedestrian desire lines.

29 Re-site trunk road sign further to the north to eliminate its intrusion into the river scene.

Possible Future Schemes

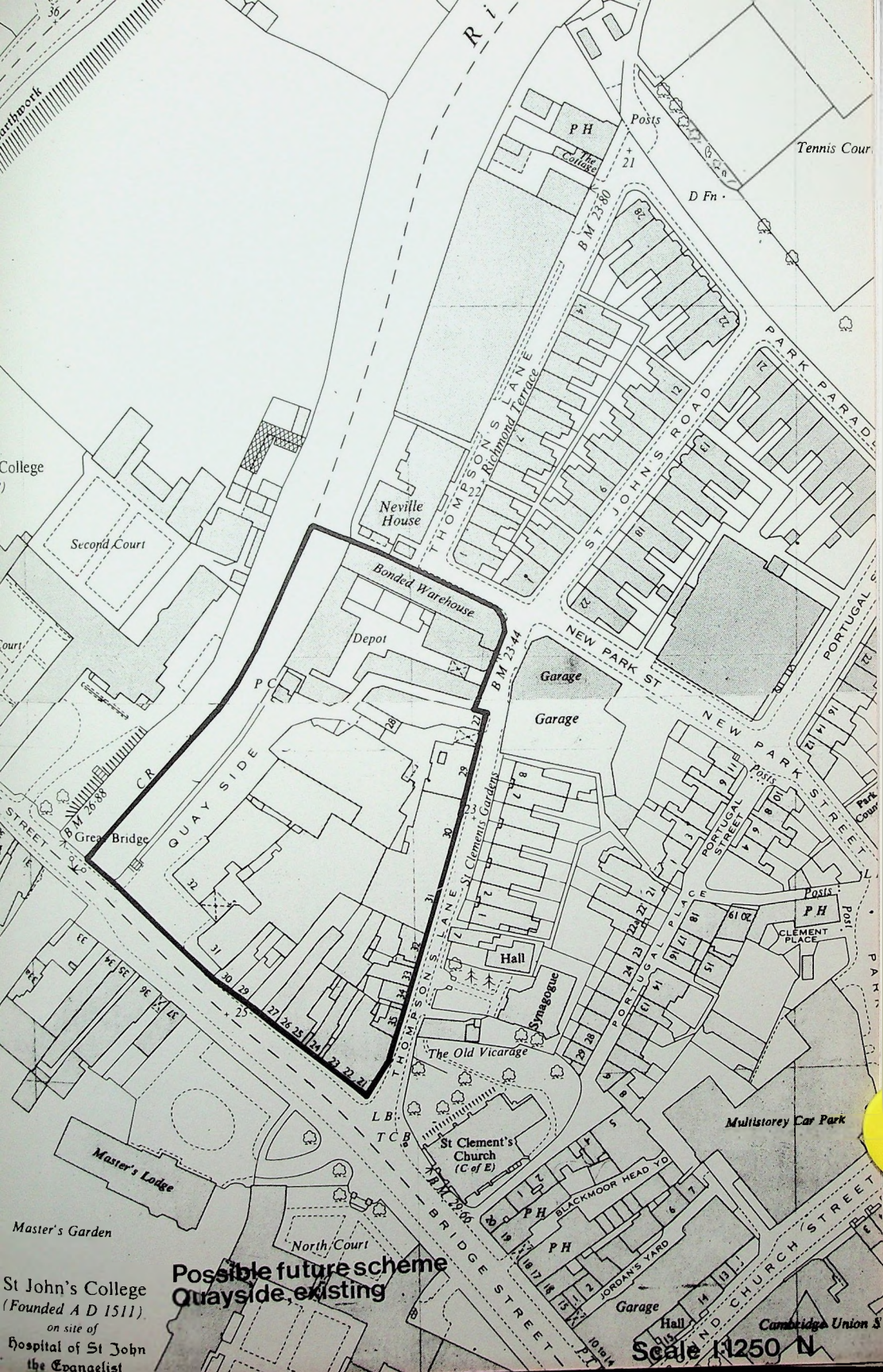
There are certain areas along the Cam where there is considerable need for revitalisation of the environment and great potential for the development of new leisure facilities. This section of the report puts forward suggestions for two such areas, Quayside and Cheddar's Lane Pumping Station.

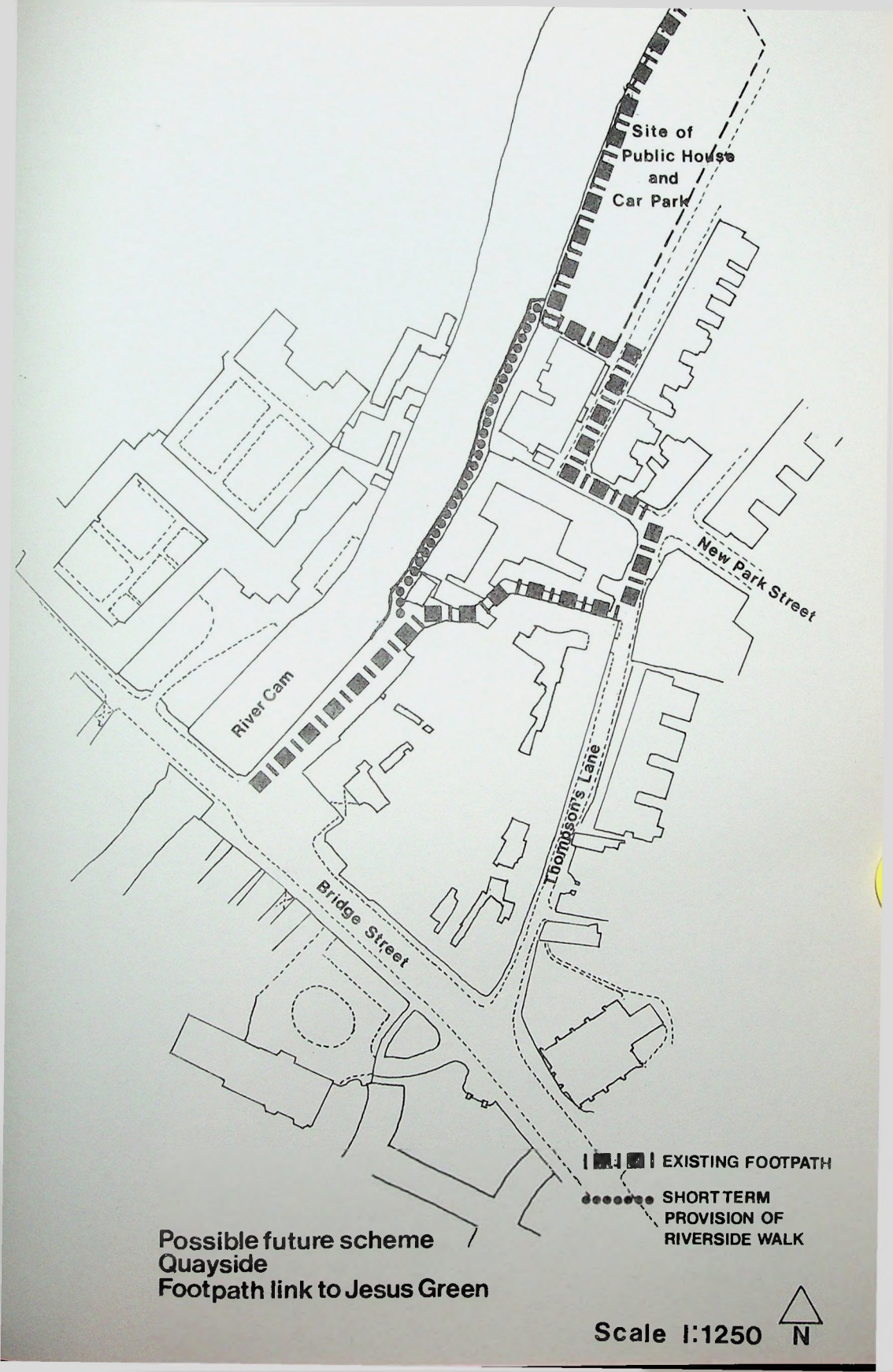
Quayside

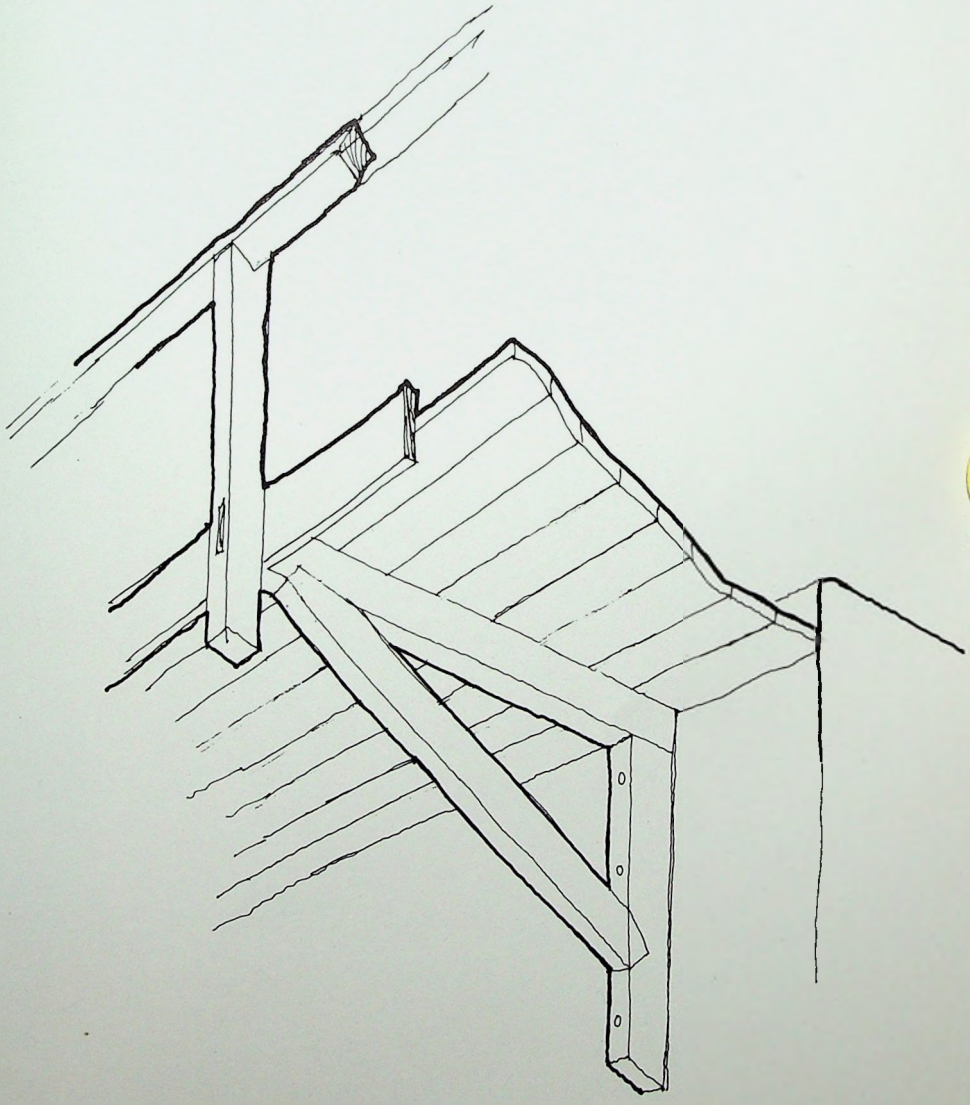
Earlier in this study the potential of Quayside as an area for redevelopment was mentioned. In this section, this potential is further explored and a possible scheme put forward. This should not be regarded as a definite proposal, but rather as an idea to generate interest and other ideas.

At present, the area adjoining the river between Quayside and Thompson's Lane is occupied by commercial premises which preclude the possibility of a direct pedestrian connection with Jesus Green. In the short term the redevelopment of the George and Dragon Public House will enable a further short stretch of riverside walk to be constructed. One answer to the provision of the direct pedestrian connection is to produce a cantilevered walk past the river frontages of the commercial buildings and Neville House to the Public House site. This could well be attractive and become a permanent feature. The form of construction is shown on the drawing.

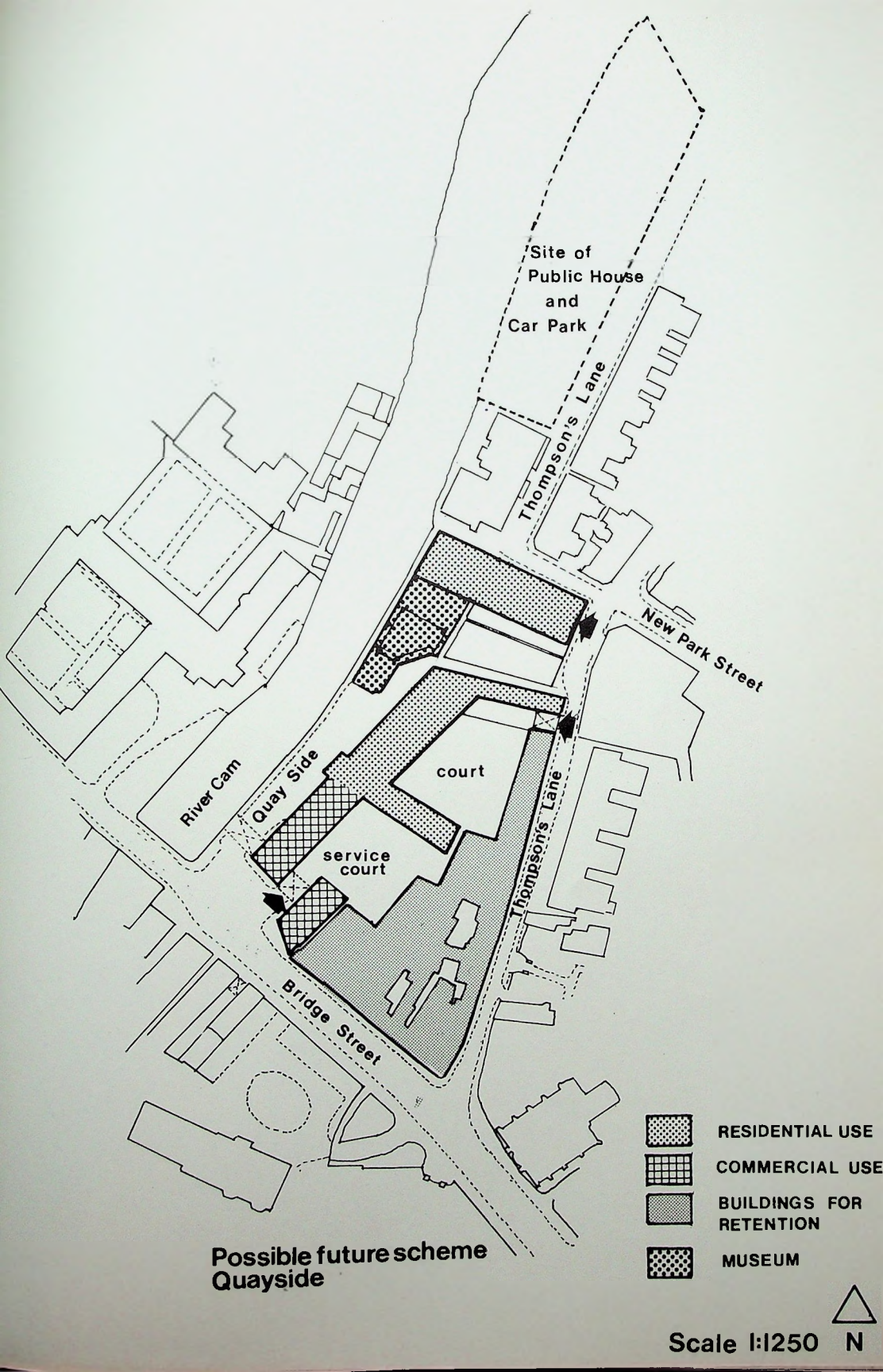
The remaining drawings show one way in which the area could be revitalised by redevelopment. The existing commercial uses are grouped at the southern end of the site and could be served from a service court off Bridge Street. At the northern end of Quayside a museum is shown. This could be an extension to the Folk Museum which is very overcrowded at the moment, and could concentrate at least one part of its galleries on exhibitions concerned with the history of the river and especially rowing. Incorporated either within the museum or as part of the commercial use, it would be desirable to have restaurants and cafes which could extend their activities on to the Quay itself.

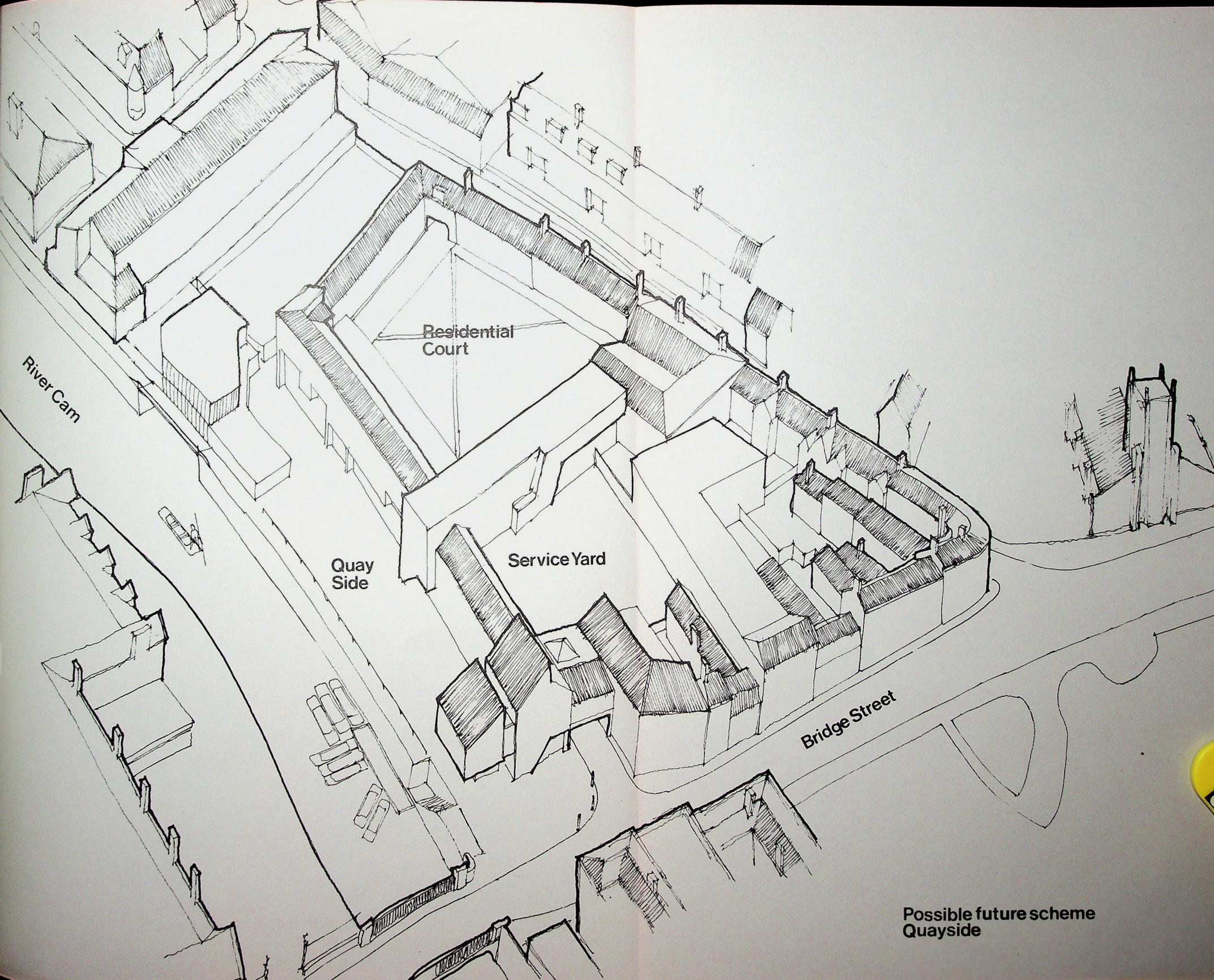

Possible future scheme
Quayside, existing
Scale 1:1250 N
St John's College
(Founded A D 1511)
on site of
Hospital of St John
the Evangelist
Second Court
Neville House
Bonded Warehouse
Depot
Garage
Garage
Garage
Hall
Synagogue
The Old Vicarage
St Clement's Church
(C of E)
Master's Lodge
Master's Garden
North Court
Multistorey Car Park
Tennis Court
Posts
PH
The College
Richmond Terrace
THOMPSON'S LANE
ST JOHN'S ROAD
PARK PARADE
NEW PARK ST
NEW PARK STREET
PORTUGAL STREET
PORTUGAL PLACE
CLEMENT PLACE
ST CLEMENTS GARDENS
QUAYSIDE
BRIDGE STREET
CHURCH STREET
BLACKMOOR HEAD YD
JORDAN'S YARD
Great Bridge
BM 26·88
BM 23·44
BM 23·80
BM 29·06
LB
TCB
PC
CR
Cambridge Union S


Site of
Public House
and
Car Park
New Park Street
River Cam
Thompson's Lane
Bridge Street
EXISTING FOOTPATH
SHORT TERM
PROVISION OF
RIVERSIDE WALK
Possible future scheme
Quayside
Footpath link to Jesus Green
Scale 1:1250
N



Possible future scheme
Quayside
Proposed cantilevered footpath


Site of
Public House
and
Car Park
Thompson's Lane
New Park Street
River Cam
Quay Side
court
service
court
Thompson's Lane
Bridge Street
RESIDENTIAL USE
COMMERCIAL USE
BUILDINGS FOR
RETENTION
MUSEUM
Possible future scheme
Quayside
Scale 1:1250
N



Possible future scheme
Quayside

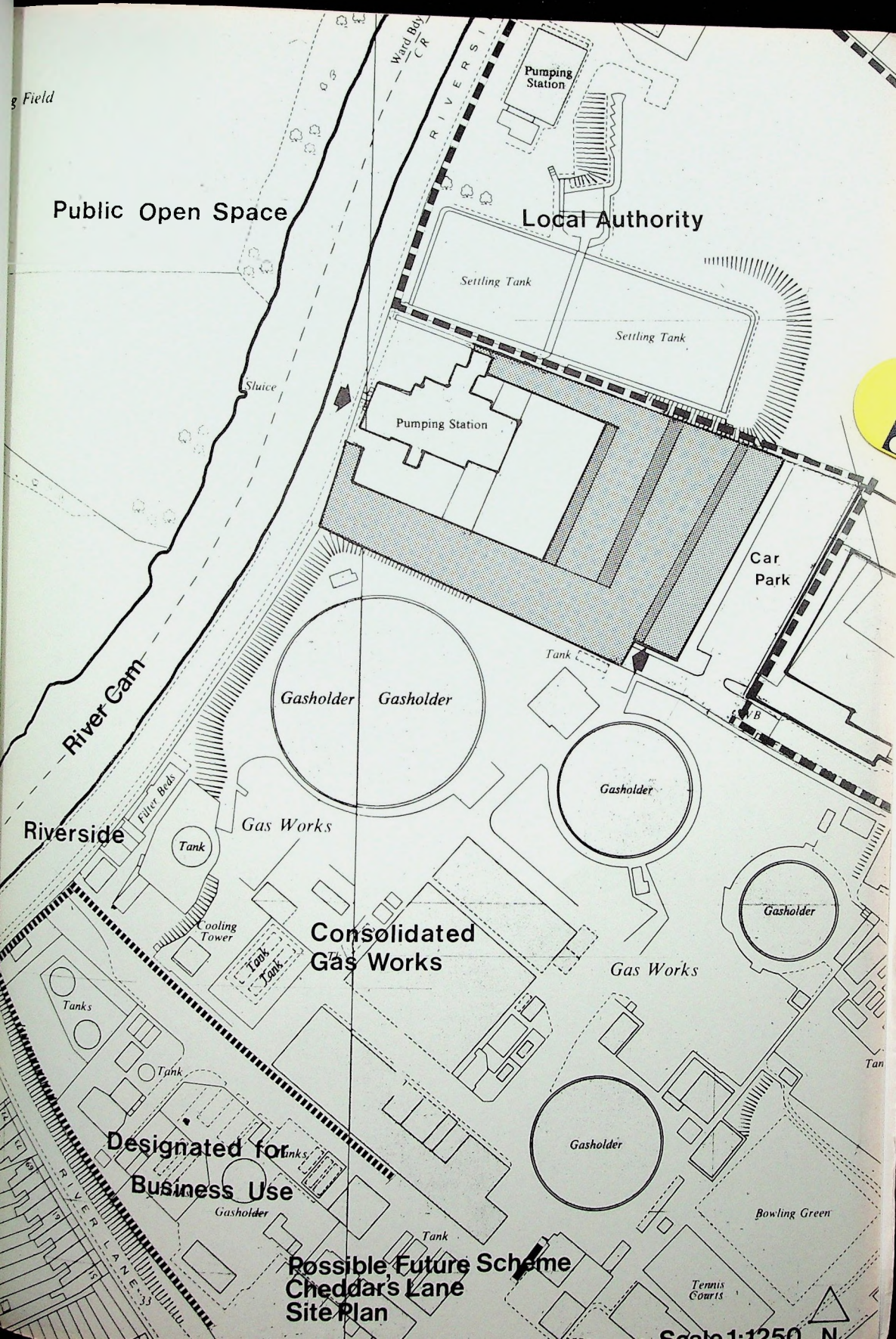
Cheddar's Lane

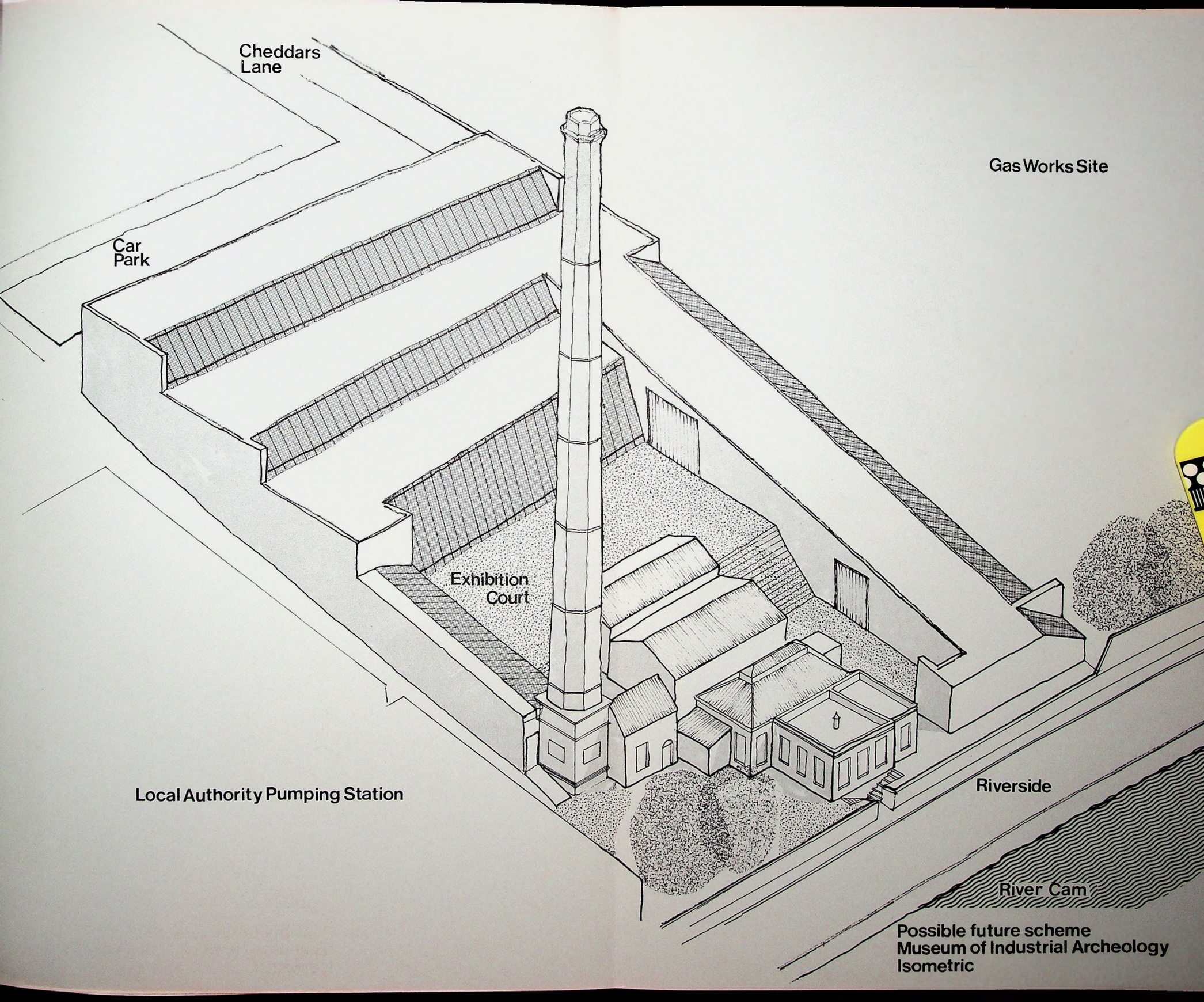
The Cheddar's Lane Pumping Station was built in 1894 and continued in operation until May 1966, when its function of feeding sewage to the Milton Road Sewerage Works was taken over by a new electric pumping station on the adjoining site.

It is unique in Cambridge and is a significant example of Victorian technology. The buildings and care of the machinery have been taken over by the Cambridge Society for Industrial Archaeology who open the pump house to the public and organise other exhibitions there from time to time. This Society has long had the desire to expand their operations into a full Museum of Technology, and the following drawings show one way of doing this.

The new museum is built around the Victorian buildings using the pump house and the chimney as focal points. On the sloping site, and with due regard for the size and weight of possible exhibits, the building is provided with a main ramped gallery running the full depth of the site and serving terraced galleries and an external exhibition space.

The main access to the museum would be from Cheddar's Lane, with a secondary pedestrian access from Riverside.


Public Open Space
Local Authority
River Cam
Riverside
Consolidated Gas Works
Designated for Business Use
Possible Future Scheme
Cheddar's Lane Site Plan
Pumping Station
Settling Tank
Settling Tank
Pumping Station
Car Park
Gasholder
Gasholder
Gasholder
Gasholder
Gasholder
Gasholder
Gas Works
Gas Works
Tank
Filter Beds
Cooling Tower
Tanks
Tanks
Tank
Tank
Tank
Tank
Tanks
Tanks
Bowling Green
Tennis Courts
Sluice
Ward Boy
RIVER
RIVER LANE
Scale 1:1250



Possible future scheme
Museum of Industrial Archeology
Isometric

Acknowledgements

This Report was prepared by the Planning Division of the Department of Architecture and Planning:

I. M. Purdy, A.R.I.B.A., Dip.T.P., M.R.T.P.I.,
City Architect and Planning Officer.

M. F. Brookes, B.Sc.(Est. Man.), A.R.I.C.S., F.R.T.P.I.,
Deputy City Planning Officer.

The detailed work, analysis and design of the report was carried out by D. W. Urwin, M.A., M.R.T.P.I.,
N. Hellawell, Dip.Arch., Dip.T.P., and Mrs. J. A. Urwin.

The study team wishes to acknowledge the assistance given by the Town Clerk; the City Treasurer; the City Surveyor; M. Petty of the City Librarian's Department; Gordon Patterson, Dip.L.A. (Read), A.I.L.A., the Cambridgeshire and Isle of Ely Naturalists Trust Ltd., and the Cambridge Civic Society.

Photographs by N. Mason-Smith.

Drawings by Ann Abraham, Mike Craig and Allan Sibley of the C.C.A.T. School of Art.

Typing by Miss C. Pike.

Cover from an etching by R. Farren, 1889, printed by Saffron Press Ltd.

Plate making by Cambridge Litho (Plates) Ltd.

The Report was printed by L. D. Smith and E. Hewett of the Printing Section, City Treasurer's Department.

Price: £2·00.

FIRST EDITION
AUGUST, 1973